
Technical Guide

Technical Support Guide

Version: V1



Vista Entertainment Solutions Ltd.

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About Vista

Vista Entertainment Solutions develops software for the Cinema Exhibition industry. The Vista software system consists of a number of integrated products that cover almost all aspects of managing and operating cinemas. The product line is scalable so as to be suitable to exhibitors who run from one cinema to hundreds of cinemas.

The Vista Point of Sale and Vista BackOffice (base Vista) provide all Cinemas level function for Box Office and Concessions. At least one installation of Base Vista is required for all Vista customers. All other modules are optional.

The optional modules are:

- **Web Ticketing** - a customisable system that enables ticket sales on the Internet along with display of show times and movie information.
- **IVR Ticketing System**- an automated touchtone phone booking system.
- **Vista Kiosk** - a customisable ATM ticketing system that features touch screen and state of the art multimedia technology for remote ticket sales either on or off-site.
- **Call Center** - provides a central web based application for booking and selling seats across a circuit of cinemas.
- **MobilePOS** - utilises a Pocket PC based PDA's to sell tickets and concessions while connected to the Vista system via a wireless network.
- **Vista Signs** - manages configured animated messages on cinema signs including LED, TV Monitors and Plasma.
- **Vista Projection** - controls the export of cinema show-time schedules to automated projection systems.
- **Vista Air Conditioning** - provides an interface between base Vista and the air conditioning system to regulate air circulation and temperature depending on head count information stored in the Vista database.
- **HeadOffice** - provides central maintenance of key cinema data, uploading of cinema performance data to HeadOffice, a film settlements system and a business intelligence system for analysing circuit wide performance.
- **CashDesk** - a companion product for Vista BackOffice for cinemas that wish to have higher levels of cash and treasury control within the cinema.
- **Employee Scheduling** - provides a graphical employee roster system at cinema locations, along with a HeadOffice module that consolidates all roster information.
- **Film Programming and Scheduling** - a companion product to HeadOffice. It is a system for planning and booking films across a circuit from a central location. The booking system generates best fit schedules to download to the cinema.
- **Voucher Management** - a companion product to Vista HeadOffice that controls the ordering, stocking, transfer, and redemption of coupons, vouchers and passes.
- **Loyalty** - a customer relation management program for the creation, maintenance and evaluation of loyalty programs.

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Vista Entertainment Solutions Ltd
PO Box 8279, Symonds St,
Auckland, New Zealand.
Ph: +64 9 357 3600
Fax: + 64 9 379 0685
Website: <http://www.vista.co.nz>

CHAPTER 1

Using This Guide

This guide is for technical staff who use Vista applications. This guide describes:

- Vista Policy on Database Modification
- Vista Security Policy
- Supported Hardware and Operating Systems
- Use the Vista Job Scheduler
- Install and use the Extract Program Generator
- Set up Print Templates

Vista Policy on Database Modification

The following has been written and must be adhered to for these customers who wish to made changes to the database or write their own programs that work with the Vista System.

Vista Entertainment Solutions Ltd has written these policies to avoid 3rd Party programs and database modifications interfering with Vista Applications and Databases.

Database Changes

No database changes are to be made to any Vista database (e.g. VISTA, VISTAHO, VISTAVM, VISTAIT) including:

- No modifying Vista Tables (e.g. adding of columns, deleting of columns, modifying existing columns or modifying referential integrity).
- No modifying Vista Stored Procedures (including stored procedures used by reports).
- No modifying Vista Views.
- No modifying Vista Triggers.

Any modification violates Vista Support and Maintenance agreements. Any modifications could cause problems during upgrades and cause unknown problems with Vista Software which Vista is not responsible for.

If you feel that a modification is require eg a database field is too small, then please contact Vista Entertainment.

However, Vista Entertainment has set the following rules to allow 3rd Parties to write their own reports and stored procedures.

A cinema can:

- (1) Write their own Reports.
- (2) Write their own Stored Procedures e.g. for use by a report or extract process.
- (3) Create a table required by a stored procedure e.g. for a report to process from.

Any other database modifications must be added to a separate Non-Vista database.

The following rules apply so that these do not conflict with Vista.

(1) Folders:

Vista Software resides in the folder structure \Vista and folder paths below this. No 3rd party software should not be put in, or below \Vista

However, all reports written in Crystal, should be put under the folder \Vista\ReportFiles\ so they can be called from the Vista Menu.

(2) Reports:

Vista Entertainment reports are in the format visxxxxxxx.rpt e.g. visTicketType.rpt

All reports not written by Vista Entertainment, must not start with 'vis'.

We suggest you use your company name to identify script e.g. AlliedTaxPReport.sql (for Allied Cinemas tax report).

(3) Stored Procedures:

Vista Entertainment stored procedure are in the format spxxxxxxxxxxxxxxxxxxx e.g. spEMSBOSalesByTransDate.

All stored procedures not written by Vista Entertainment, must not start with 'sp' or 'rpt'.

Vista Entertainment has a lot of different names for their database scripts e.g. spxxxxxxxxxxxxxxxxxxx.sql for stored procedures and rptxxxxxxxxxxxxxxxxxxx.sql for it's report stored procedures.

We suggest you use your company name to identify script e.g. AlliedTaxProcedure.sql (for Allied Cinemas tax stored procedure) and the actual stored procedure e.g. AlliedTaxProcedure.

(4) Report Tables:

Vista Entertainment names its tables in the format tblxxxxxxxxxxxxx e.g. tblFilm for normal tables and report tables are tblRptxxxxxxxxxxxxx e.g. tblRptTicketType

If a new table is to be created, it must not start with 'tbl'

We suggest you use your company name to identify the table e.g. AlliedDeptCategories (for Allied Cinemas Department Categories table).

(5) To Stop Stored Procedures Locking Database Tables:

The following should be added to the start and end of a stored procedure used for reports to prevent locking.

At start of Stored Procedure

```
-- Prevent any shared locks being created during execution of SP  
SET TRANSACTION ISOLATION LEVEL READ UNCOMMITTED
```

At end of Stored Procedure

```
-- Revert back to normal locking behavior  
SET TRANSACTION ISOLATION LEVEL READ COMMITTED
```


CHAPTER 2

Remote Support

Vista Entertainment uses any of the following products to provide remote support:

- Terminal Services (i.e. Remote Desktop)
- VNC
- RAdmin
- PC Anywhere

One of these products must exist on each fileserver (cinema and headoffice servers). The preferred communication method is using VPN over the Internet to provide Vista Entertainment.

Installing these remote access software on other computer eg Backoffice, Point of Sale and Kiosks, assists with remote support as well. If remote access is not available on these client computers, then these applications should be installed on the fileserver, which will assist support staff when investigating any issue.

Vista Security Policy

The following information explains Vista's Security Policy. There are four components:

- Installing Vista
- Server Computers
- Client Computers
- Vista's Internal Security

Installing Vista

All Fileservers and all Client computers must be logged in with Windows Administrator rights, not local user rights, when installing the Vista software.

When installing Vista databases or upgrading them, you must be connected to the database using a SQL logon with SQL Administrator rights. When the install/upgrade process is completed, it disconnects the user from the database, terminating the SQL Administrator rights logon.

Server Computers

When logging onto a computer that will run a Vista application, the user can be a standard Windows User with DomainUser rights.

Vista databases are accessed using any SQL Logon that belongs to the SQL Role called 'VistaUsers'. The SQL Logon and password that is used to connect to the database is encrypted by Vista.

Users who log on to Windows on Servers require full Read/Write/Access rights to the local folder containing the Vista software and the VistaInstall folder if they wish to use the Vista software.

Any user logging on to the Headoffice Server, also requires full Read/Write/Access rights to the HOTransfer share folder.

All servers need to provide Read access rights to the Vista and VistaInstall share folders to any client computers that will connect to them to run Vista applications e.g. Point of Sale computer.

3rd Party Payment Gateway software may require more access to other folders.

Some SQL Jobs require SQL Logon with SQL Administrator rights to run. These are SQL jobs that perform backups, database consistency checkers and purges. The passwords required to run these jobs cannot be encrypted, however when viewing/editing the properties of the job, to have reached this point, a user must have SQL Administrator rights and therefore have a password.

Client Computers

When logging onto a computer that will run a Vista application e.g. Point of Sale or Backoffice, the user can be a standard Windows User with DomainUser rights.

Vista databases are accessed using any SQL Logon that belongs to the SQL Role called 'VistaUsers'. The SQL Logon and password that is used to connect to the database is encrypted by Vista.

3rd Party Payment Gateway software may require more access to other folders.

Vista's Internal Security

Vista Users are stored within the Vista databases. Passwords are encrypted. PIN numbers can either be set by the user or randomly generated. Passwords can be forced to have a certain number or alpha and numeric characters. Passwords/PIN numbers can be set to expire after a certain length of time. The number of attempts that a user can attempt to log on with the wrong password can be set.

A User can only create new Users that have the same level access as themselves or lower, but only if they have access to the User Maintenance form.

Point of Sale users can log on with a User number and PIN. Other modules require User names and passwords.

All users belong to a user group. All security for Vista Point of Sale, Backoffice, Headoffice and Voucher Management is set at a user group level.

Each user group has a level from 0 to 9 (0 being the highest). Most buttons within Point of Sale and some features and messages can have a security level assigned so that the user who approves the use of the feature must have the necessary security level to access it

Every Cabinet can have one of the following editing attributes applied at a User Group level:

- **None:** The user cannot open this cabinet.
- **Read:** This gives the user rights to use the Cabinet to view data.
- **Create/Edit/Delete:** This gives the user rights to change data within the cabinet grid, provided the fields are set to "editable". They can delete data in the Cabinet or create new data but only if the Cabinet has been defined by Vista as being able to be edited.

Every Cabinet can have one of the following viewing attributes applied at a User Group level:

- **Global:** This gives the user rights to:
 - View Base cabinet views.
 - View & create Global cabinet views.
 - View & create Private cabinet views.
- **Private:** This gives the user rights to:
 - View Base cabinet views.
 - View & create Private cabinet views.
- **None:** The user cannot create views. This permission would normally only be assigned if the Cabinet Editing permission is also None.

Maintenance forms can have the following access levels, defined at a User Group level. Each access level can be turned on/off independently:

- **None:** This is achieved by un-checking all of the options. This means that the user cannot access this form.
- **Read:** This gives the user rights to view data.
- **Insert:** This gives the user rights to create or insert data.
- **Edit:** This gives the user rights to edit existing data.
- **Delete:** This gives the user rights to delete data.

Handling Membership Cards

This section is divided into the following topics:

- Structure of the Membership Table.
- Format of Membership Data on Magnetic Swipe Cards.
- Importing Membership Table from External Source.

Structure of the Membership Table

Table Description: Membership Table

Table Name: tblMembers

Details: This table is used to hold membership details, e.g. Membership number, name and expiry date (if any).

Primary Key: Member_strCode

Column Name	Type	Size	Description
Member_strCode	varchar	30	This is Members Card Number, made up of the Card Identifier and the Membership Number e.g. 130009821234
Member_strTitle	nvarchar	20	Title of member e.g. Mr, Mrs, Ms, Miss, Dr
Member_strFirstName	nvarchar	40	First name of member
Member_strLastName	nvarchar	60	Last name of member
Member_dtmCardExpiry Date	datetime		Expiry date of member MM/DD/YYYY
Member_dtmFirstJoinDate	datetime		Date the member joined MM/DD/YYYY
Member_strStatus	Char	1	Status of this member (A=Active, I=Inactive)

Format of Membership Data on Magnetic Swipe Cards

Track 2:

Vista Uses Track 2 to retrieve the card number. Track 2 can only support numeric (and up to 39 numbers), so the card number i.e. card identifier and membership number must both be numeric.

In the example, card number is 130000012345, where:

- Card Identifier is 13000
- Membership Number is 0012345

The universal standard is for the card number to be preceded by a semi colon i.e. ;

The universal standard is for the card number to be terminated (end with) an equals sign i.e. =

In this example, the expiry date has also been saved on the card. This currently cannot be interpreted by Vista. If the day is important to you as well (and not just the month/year), then this should be included.

June 2003

This example now follows the credit card standard:

;130000012345=0306

Track 1:

Currently, Vista does not use track 1. It allows alphanumeric.

The start of data, uses the percentage symbol i.e. %.

The end of data, use the question mark symbol, i.e. ?

A caret i.e. ^ divides up data

Vista is likely to use track 1 when its loyalty module is complete, but at the moment has no set standard.

The credit card standard would look like this:

%130000012345^Mr John Ciitizen^0306?

Importing Membership Table from External Source

There are several ways of importing membership details from an external source. This document will focus on the membership information being in an Excel Spreadsheet.

Here is part of the Example spreadsheet:

Card Number	Title	First Name	Last Name	Expiry Date	Status
1300000000001	Mr	Brent	Watson	12/31/2003	A
1300000000002	Mr	Simon	Brown	1/1/2003	A
1300000000003	Miss.	Cathy	While	2/25/2003	A
1300000000004	Ms.	Kary	Clarke	7/4/2002	A
1300000000005	Ms.	Jackie	Collins	9/20/2005	A

Note: Status 'A' is active, 'I' is inactive.

You can either:

- From Excel, you could Export the membership details to the Vista Database table tblMembers
- From SQL Server, you could use Data Transformation Services (DTS) to Import the details from an Excel Spreadsheet

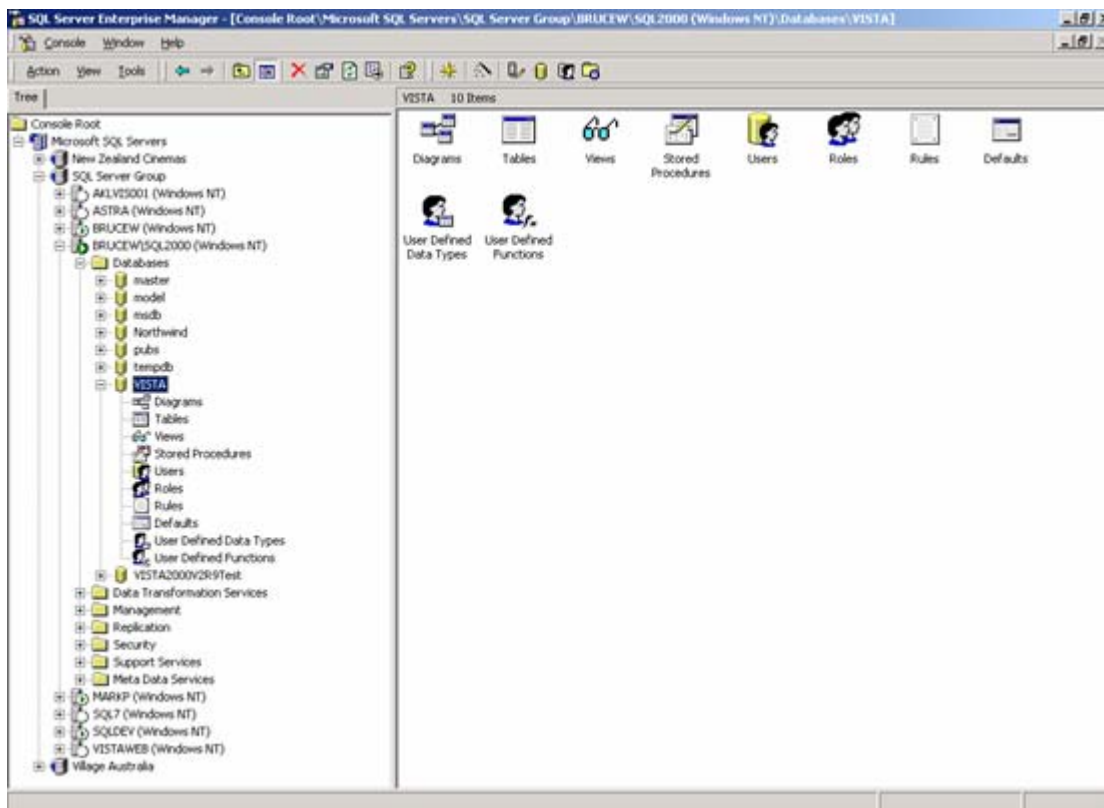
This process describes the second process (i.e. using DTS).

Step One

Start SQL Server – Enterprise Manager:

- Highlight the VISTA Database.

- Click on the Wizard Icon (looks like a wand on the icon – on the same line as Action, View and Tools).

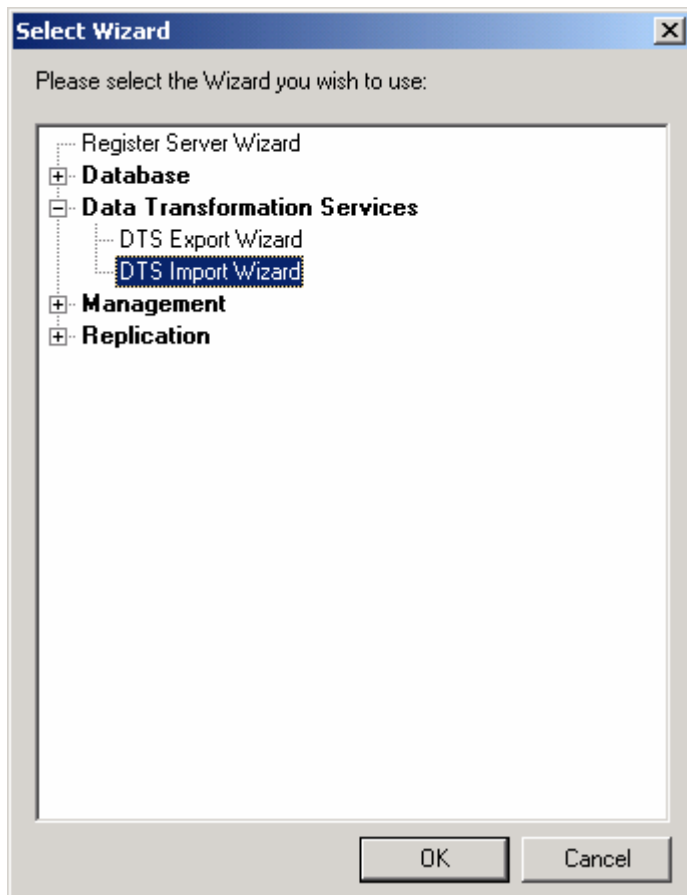


Step Two

Drill down on Data Transformation Services and then DTS Import Wizard:

<ok>

<next>



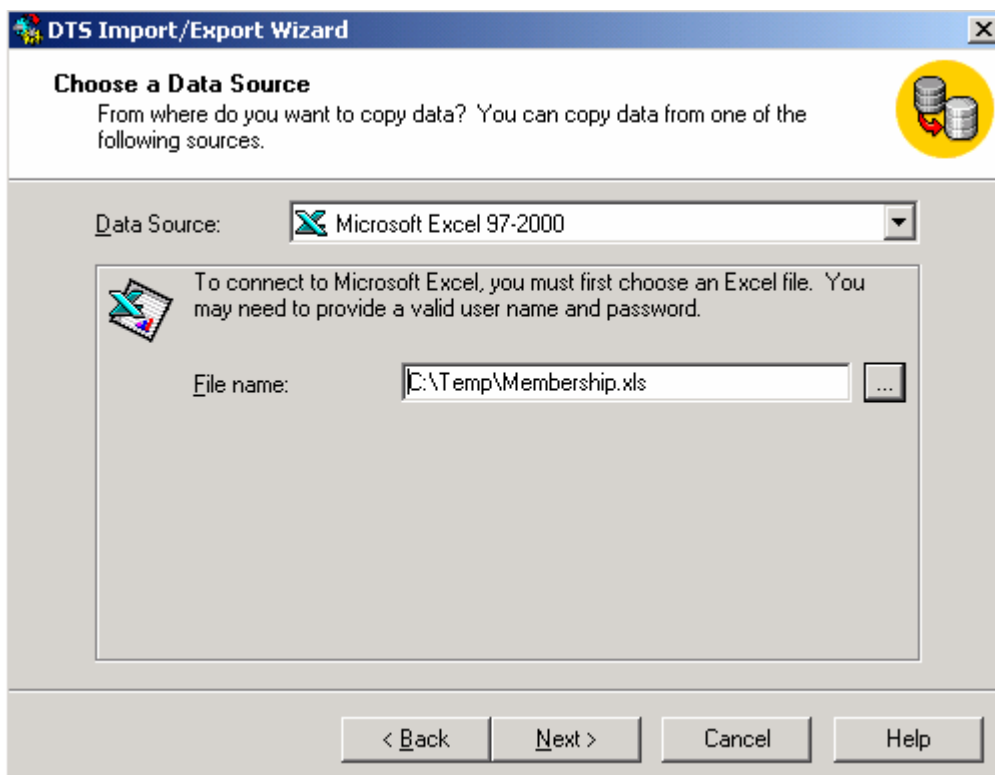
Step Three

Choose the Source:

Select the correct database source, in this case Microsoft Excel 97-2000.

Select the file name to import i.e. the name of the spreadsheet

<next>



Step Four

Select what to export to:

Destination: Microsoft ODBC Driver for SQL Server

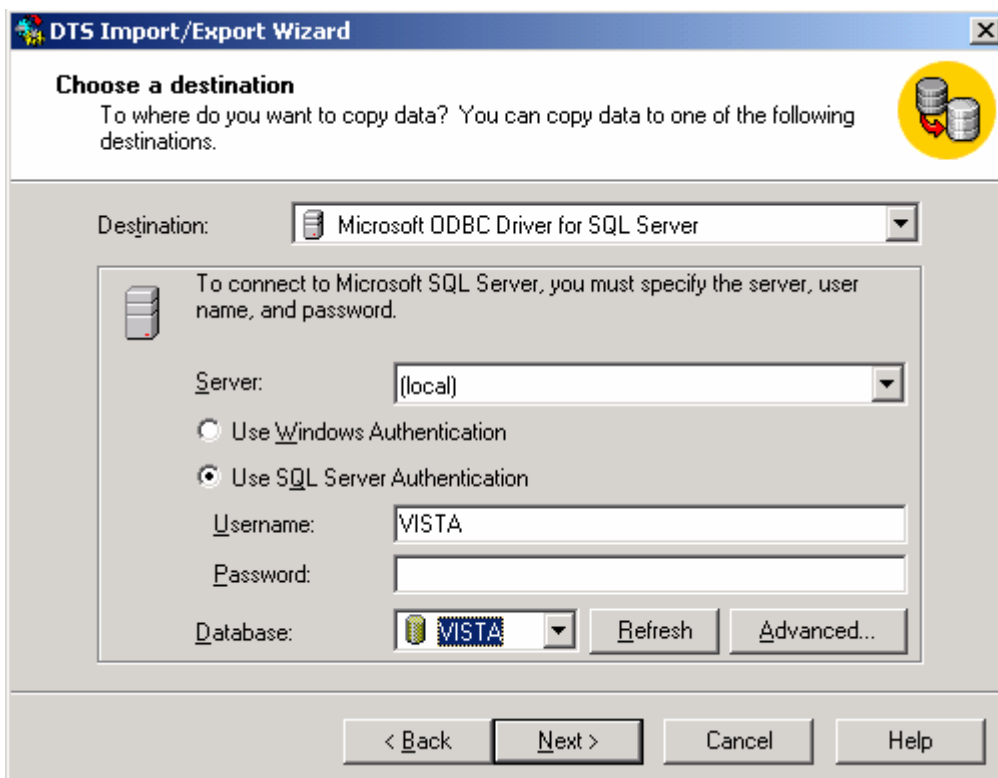
Server: E.g. {local}

Select the SQL User to use

Press Refresh to get a list of databases

Select Database (VISTA)

<next>

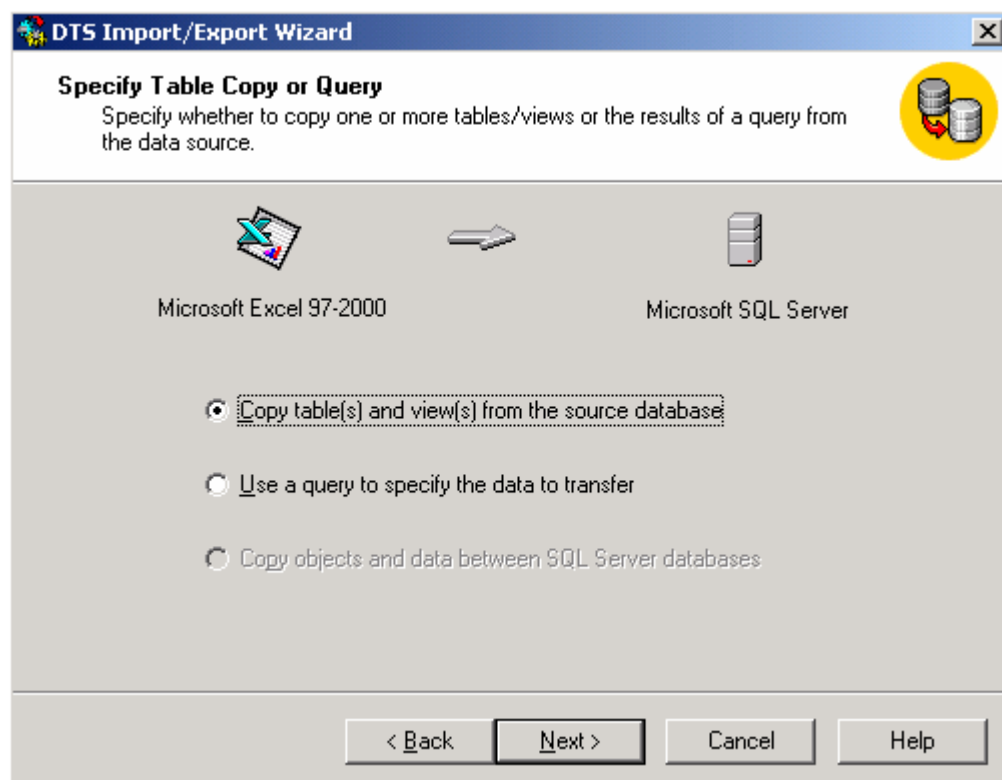


Step Five

Specify Table Copy or Query:

You could do either:

- 1 Try and automate the process

2 Write an SQL Query which will process the import

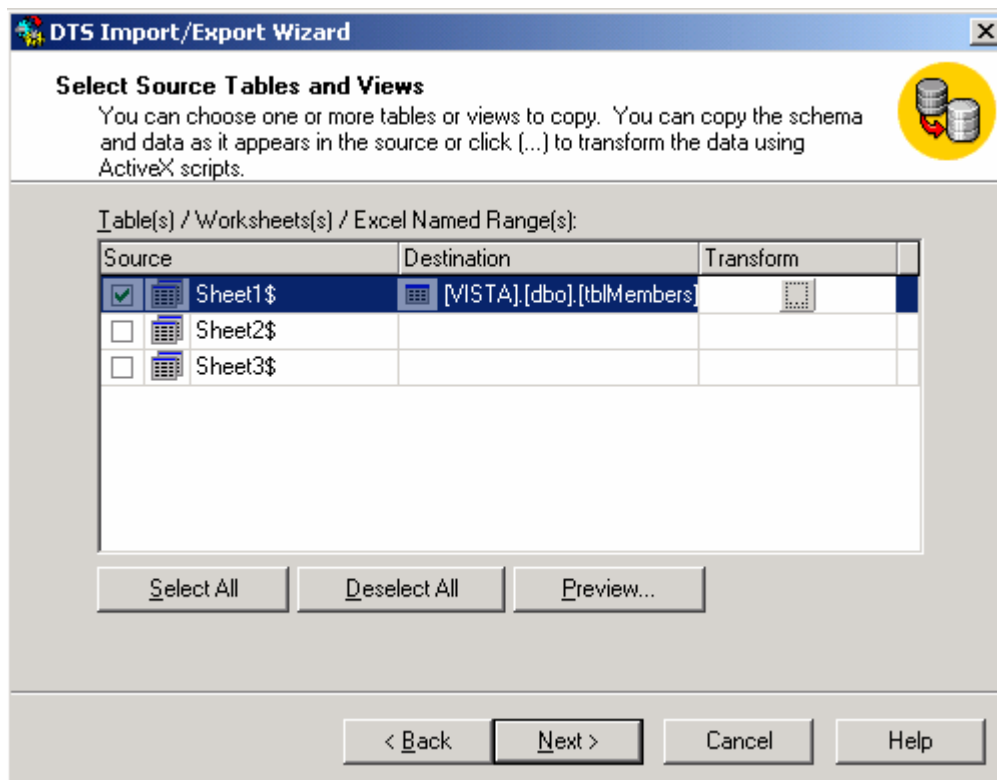
Step Six

Choose the Table:

You must select the VISTA.tblMembers (i.e. Database VISTA and the membership table).

In the example, there is more than one Excel Sheet to choose from, you can preview to make sure you select the correct one.

Unless the Excel Spreadsheet is in exactly the same format as the Membership Table, you will need to press the 'Transform' button, so you can map what spreadsheet columns go to what table columns.



Step Seven

Choose the Mappings:

Ideally, you should choose 'Delete Rows in Destination Table', which means that each time, the spreadsheet will contain all old and new members. This makes it easier.

The other way would be to 'Append rows to Destination Table' but this means you need to make sure the Member does not already exist.

Never choose 'Create Destination Table' as it will delete the VISTA table called tblMembers, first.

You can select the source column, use <Ignore> if you are not going to process a column. You will need to have one column for first name and one for last, else write a SQL statement to try and split the two up.

You MUST define the Status of the member e.g. A for active as the column Member_strStatus cannot be NULL (i.e. blank).

<ok>

<next>

Column Mappings and Transformations

Source: Sheet1\$
Destination: [VISTA].[dbo].[tblMembers]

Column Mappings | Transformations

☐ Create destination table Edit SQL...

☒ Delete rows in destination table ☐ Drop and recreate destination table

☐ Append rows to destination table ☐ Enable identity insert

Mappings:

Source	Destination	Type	Nullable	Size	Precision	Scale
First Name	Member_strFi...	nvarchar	<input checked="" type="checkbox"/>	20		
Last Name	Member_strL...	nvarchar	<input checked="" type="checkbox"/>	30		
Expiry Date	Member_dtm...	datetime	<input checked="" type="checkbox"/>			
<ignore>	Member_dtm...	datetime	<input checked="" type="checkbox"/>			
Status	Member_strSt...	char	<input type="checkbox"/>	1		

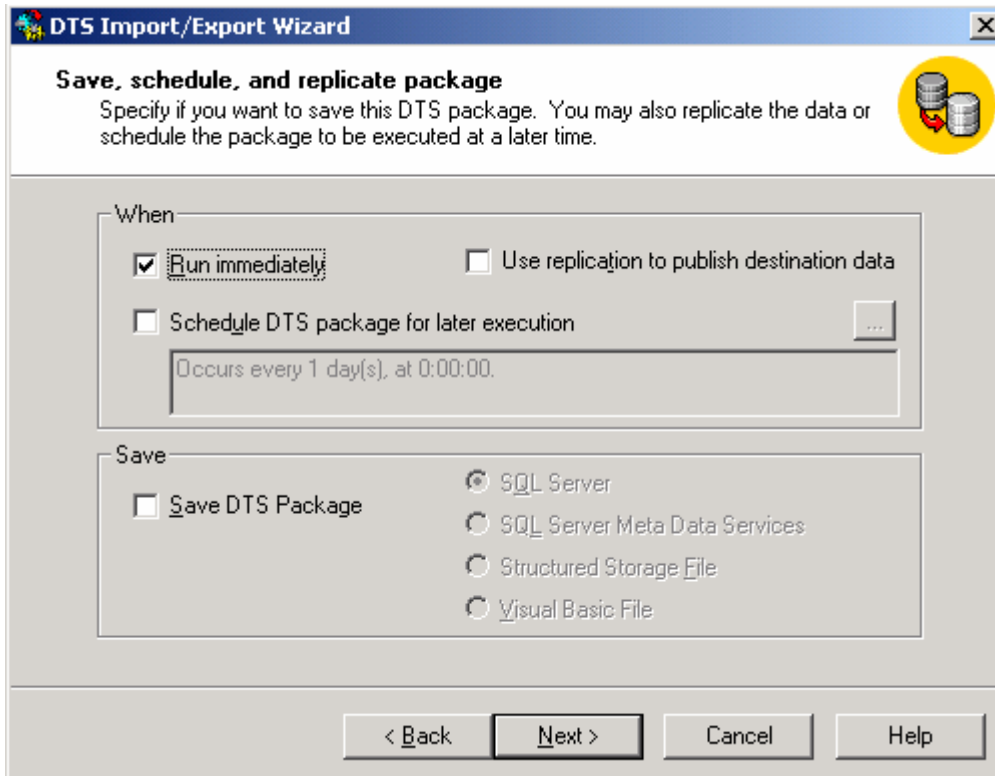
Source column: Status VarChar(255) NULL

OK Cancel Help

Step Eight

Can either run immediately or schedule as a job, e.g. run once a day:

<next>



DTS Import/Export Wizard

Save, schedule, and replicate package
Specify if you want to save this DTS package. You may also replicate the data or schedule the package to be executed at a later time.

When

☒ **Run immediately** ☐ Use replication to publish destination data

☐ **Schedule DTS package for later execution** ...

Occurs every 1 day(s), at 0:00:00.

Save

☐ **Save DTS Package**

☒ **SQL Server**
☐ SQL Server Meta Data Services
☐ Structured Storage File
☐ Visual Basic File

< Back **Next >** Cancel Help

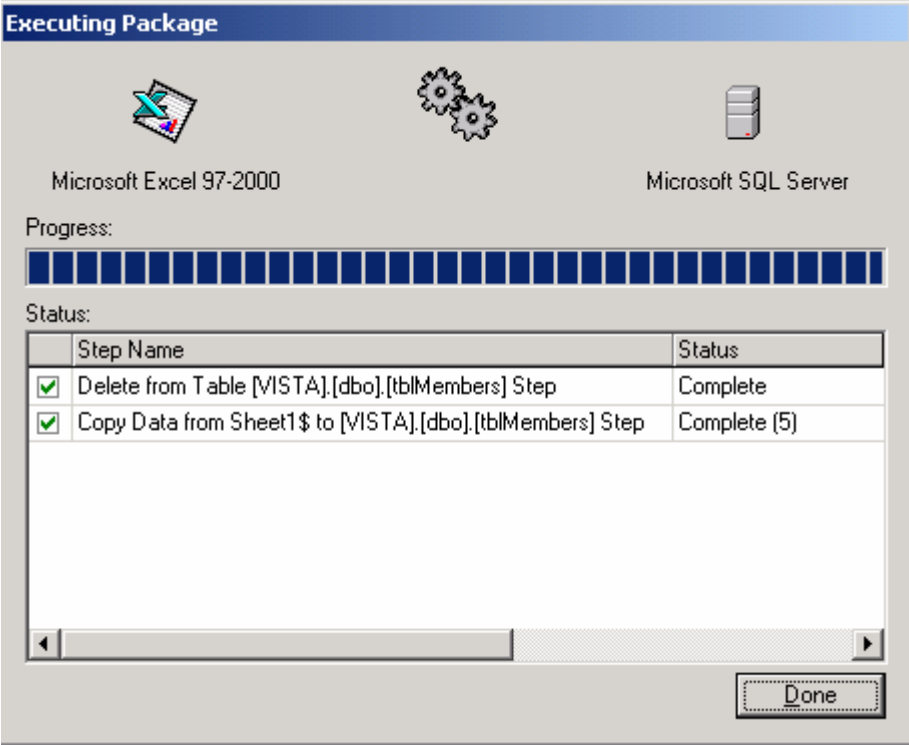
Step Nine

Press <finish> to complete:



Step Ten

If successful, this is what you will see:



CHAPTER 3

Supported Hardware and Operating Systems

This contains recommendations for the following:

- Cinema Fileserver Recommendations.
- Point of Sale Recommendations.
- Kiosk Recommendations.
- Ticket Printer Recommendations.
- Backoffice and Headoffice Client Recommendations.
- MobilePOS Recommendations.
- Web Server Recommendations.
- IVR Server Recommendations.
- Hardware Concepts for Plasma Modules.
- Sign Control Headware Recommendations.
- Headoffice Database Server Recommendations.
- Wide Area Networks Recommendations.

Cinema Fileserver Recommendations

(This is for Vista Version 2 or 3)

The following are suggestions for Cinema fileservers.

Large Cinema (More than 1 million admits per annum):

- Server with 2.8Ghz/133 FSB processor
- 256Kb cache
- 2Gb RAM eg 133 Mhz SDRAM ECC RDIMM
- Raid SCSI Controller Card
- 3 or 4 disks each 9.1 Gb 15K-rpm Ultra 16 SCSI HS HDD (for RAID 5)
- SCSI Tape Drive
- CD-ROM or DVD drive
- Monitor, Keyboard and mouse
- UPS
- Modem to connect to phoneline (for support via dialup or over Internet)
- Microsoft Windows 2000 Server or 2003 Server Server (Standard Edition)
- Microsoft SQL Server 2000 Standard Edition, if log shipping used Microsoft SQL Server 2000 Enterprise Edition
- Antivirus software eg Nortons or McAfee

Medium Cinema (250,000 to 1 million admits per annum):

- Server with PIII 1.8 GHz processor
- 256Kb cache
- 1Gb RAM eg 133 Mhz SDRAM ECC RDIMM
- Raid SCSI Controller Card
- 2 x disks each 9.1 Gb 15K-rpm Ultra 16 SCSI HS HDD (for mirrored disks or 3 or 4 for Raid 5)
- SCSI Tape Drive
- CD-ROM or DVD drive
- Monitor, Keyboard and mouse
- UPS
- Modem to connect to phoneline (for support via dialup or over Internet)
- Microsoft Windows 2000 Server or 2003 Server Server (Standard Edition)
- Microsoft SQL Server 2000 Standard Edition
- Antivirus software eg Nortons or McAfee

Small Cinema (less than 250,000 admits per annum):

- Server with 1GHz processor
- 256Kb cache
- 1Gb RAM eg 133 Mhz SDRAM ECC RDIMM
- SCSI Controller Card
- 2 x disks each 9.1 Gb 15K-rpm Ultra 16 SCSI HS HDD (for mirrored disks)

- SCSI Tape Drive
- CD-ROM or DVD drive
- Monitor, Keyboard and mouse
- UPS
- Modem to connect to phoneline (for support via dialup or over Internet)
- Microsoft Windows 2000 Server or 2003 Server Server (Standard Edition)
- Microsoft SQL Server 2000 Standard Edition
- Antivirus software eg Nortons or McAfee

Minimum requirements:

For those sites with have existing older hardware, we generally advise that you meet at least the minimum required of the operating system and SQL Server.

While Vista would work with this processor speed mentioned below, it would be extremely slow. The Hard disk space would be very limiting and only for very small cinemas.

Windows 2000

- Server with P233 MHz or faster Pentium-compatible processor (recommend at least 500Mhz)
- 1Gb RAM
- 6Gb of disk space (recommend at least 8-9Gb)

Windows 2003

- Server with P233 MHz processor or faster required; 550 MHz or faster processor recommended
- 1Gb RAM
- 6Gb of disk space (recommend at least 8-9Gb)
-

Windows NT

- Server with P233 MHz or faster Pentium-compatible processor (recommend at least 500Mhz)
- 1Gb RAM if running SQL Server 2000, 128Mb RAM if running SQL Server 7 (512Mb is preferable for SQL 7)
- 6Gb of disk space (recommend at least 8-9Gb)

Fileserver Operating Systems and Database

Fileservers:

Version	Will work with Vista	Comment
Windows 2000 Server	Yes	This is all that is needed on all Vista servers. SP4 is good.
Windows 2000 Advanced Server	Yes	This is excessive, unless you want to setup a Web Farm etc, as has lots of additional functionality.
Windows 2000 Pro	No, unless using MSDE	Not to be used with SQL Server, only use with MSDE 2000
Windows XP Pro	No, unless using MSDE	Not to be used with SQL Server, only use with MSDE 2000

Version	Will work with Vista	Comment
Windows 2003 Server (Standard Edition)	Yes	This is all that is needed on all Vista servers.
Windows 2003 Server (Enterprise Edition)	Yes	This is the replacement for Windows 2000 Advanced Server, so only need if wanted a Web Farm etc as has lots of additional functionality.
Windows 2003 Server (Web Edition)	?	This is unnecessary.

SQL Server:

Version	Will work with Vista	Comment
SQL Server 2000 Standard Edition	Yes	This is all that is needed. SP3 is good
SQL Server 2000 Enterprise Edition	Yes	Only needed if you want to do log shipping, in which case it is needed on both servers

MSDE 2000	Yes - VistaLITE, not recommended for Vista	<p>No licence is needed to use this product.</p> <p>It has a workload governor so no more than approximately 5 concurrent users can use the database before there will be a reduction in performance (it allows 8 operations at once, 3 of which are required by SQL itself). This means more than 5 people can log on, but if more than 5 try and process concurrently, then the remaining operations will be held up, until other operations have been finished.</p> <p>MSDE is used by VistaLITE and automatically installed by this product if SQL Server 2000 is not installed.</p> <p>Although it can be used with Vista (the full version), as there are no tools eg SQL Job agent, this product is not recommended. Without SQL Job agent the following tasks cannot be performed: - eg backups, database maintenance routines, purges, releasing unpaid bookings etc)</p>
SQL Server 2000 Personal Edition	Yes but, not recommended for Vista	<p>Similar to SQL Server 2000 Standard Edition, except it has a workload governor so no more than approximately 5 concurrent users can use the database before there will be a reduction in performance (it allows 8 operations at once, 3 of which are required by SQL itself). This means more than 5 people can log on, but if more than 5 try and process concurrently, then the remaining operations will be held up, until other operations have been finished.</p>

SQL Licensing:

Type	Comment
Per Seat	Need to buy CALS. Each device that accesses SQL Server 2000 requires a separate client licence
Per Server	
Processor Licence	Unlimited licenses and needed if cinema has Web/IVR. Each processor on the that server requires a separate processor licence

Point of Sale Recommendations

(This is for Vista Version 2 or 3)

The following are some recommendations:

IBM SurePOS 500 POS Terminal:

This is a commonly used Point of Sale.

The following device is an integrated POS terminal that exists all in one unit including touch screen, processor, hard disk and cash drawer.

Hardware:

- Processor 600 MHz AMD-K6-2 © socketed processor or faster.
- RAM 32Mb for Windows 98, 128Mb for Windows 2000 or above.
- Video Memory 2, 4 or 8 MB UMA
- Hard disk drive 5 GB (or larger) 3.5 IDE
- Floppy disk drive 1.44MB (optional)
- Ports Customer display, video (VGA), RS232-serial (3), USB (2), parallel, MSR, PS/2 keyboard/PC mouse, cash drawer (2), Ethernet.
- Dimensions (HxWxD) Countertop: 13.4 to 15? x 12.8 to 13.9? x 12.6? (340 to 381 mm x 325 to 353 mm x 321 mm)

Peripherals:

- Customer Displays IBM SurePoint Solution, Distributed character display.
- Printers IBM SureMark Printer, Other printers via Parallel or Serial.
- Additional Features 1.44 MB diskette drive, Tills and locking covers, Cash drawer lock, Cash Drawers (Full size or compact), MSR.

Operating Systems: Windows NT 4.0, Window 98, Windows 2000, Windows XP.

See more at:

<http://www2.clearlake.ibm.com/store/product/html/surepos500.html>

Standard PC:

Any standard Intel PC can be used, but care must be taken to ensure a model with enough serial port capability is installed.

Serial ports may be required for cash drawers, swipe readers, bar code readers, touch screen connections, credit card controllers, receipt printers.

See the section on Supported Peripherals for Point of Sale.

Monitor to show Seat Plans to Customer:

Required for this function is eg a Matrox Dual Display card and appropriate customer facing displays. Typically this would be a thin TFT or LCD type screen.

Other POS devices:

While Vista has not specifically tested all the following devices many Vista customers have used integrated POS devices from the following manufacturers:

- ParTech
- SenorTech
- Epson
- Panasonic
- Javelin Viper
- NCR

Minimium requirements:

For those sites with have existing older hardware, we generally advise that you meet at least the minimium required of the operating system:

Windows XP:

- Computer with P233 MHz or faster processor (500MHz and above is perferred).
- 128Mb RAM
- 3Gb of disk space

Windows NT:

- Computer with P166 MHz or faster processor (500MHz and above is perferred).
- 128Mb RAM
- 3Gb of disk space

Windows 98:

- Computer with P166 MHz or faster processor (500MHz and above is perferred).
- 32Mb RAM
- 3Gb of disk space

Operating Systems

Windows XP Professional should be used, not Windows XP Home, due to limitations with network support

Supported Peripherals for Point of Sale

The following list is relevant for Vista Version 3 SP3 and onwards.

Printer

Connection Type: Parallel, Serial or USB

The way Point of Sale talks to printers for tickets, receipts, vouchers, credit cards slips and till slips is via a template that acts as a printer driver. Vista does not print via the Windows printer drivers.

There are several sections to the template.

In the definition area you need to define how certain features of the printer work eg how to print in bold, how to print using a certain font, how to print in landscape mode, how to cut the paper.

In the formatting area you define what fields you wish to print on and in what position. This allows you to customise tickets, receipt etc.

The following are some common printers Vista or customers of Vista have been able to write templates for. For printers not in the list, as long as you have the printer programming manual, you should be able to write your own template.

Models:

- Boca (using Ghost writer language)
- Practical Automation
- Epson TMT-88
- Epson TMT-90
- IBM 4610
- Zebra Stripe S500 or S600
- Intermec UBI Series
- Trident TP6688
- Verifone
- Epson TMU Series
- NCR 7197

Cashdrawer

Connection Type: Serial, OPOS or accessed via a printer

Models:

- Cashdrawers that meet the OPOS Standard
- IBM Cashdrawer for an IBM POS 4695, only on an IBM POS 4695
- Any cashdrawer triggered by an ASCII command(s)

Customer Display

Connection Type: Serial or OPOS

Models:

- Customer Displays that meet the OPOS Standard
- IBM POS 4695, only on an IBM POS 4695
- Customer Display on a M100 computer
- Any model that connects to a serial port and where text is displayed as received (ie no command processing)

Swipe reader

Connection Type: Keyboard, Serial or OPOS

Models:

- Swipe readers that meet the OPOS Standard
- Any Swipe Reader that is described as "Keyboard Wedge" and connects via the Keyboard port
- IBM POS 4695 swipe reader, only on an IBM POS 4695
- Swipe Reader on a M100 computer
- Magtek Serial swipe reader

Barcode reader

Connection Type: Keyboard, Serial or USB or OPOS

Models:

- Barcode readers that meet the OPOS Standard (can also use USB port)
- Any Barcode Reader that connects via the Keyboard port or serial port and sends ASCII

Electronic scales

Connection Type: Serial

Model:

- Avery A702

Kiosk Recommendations

The kiosk is very hardware dependent when it comes to what Card Reader and Printer it supports. We only support peripherals listed

Minimum Requirements:

For those sites with have existing older hardware, we generally advise that you meet at least the minimum required of the operating system:

- Computer with 1.2GHz Processor or above with level 1 or 2 cache (256KB).
- Graphics Adaptor, preferably with 32Mb or more memory.
- At least 512Mb RAM
- 5 GB (or larger) 3.5 IDE Harddisk
- 1.44MB Floppy disk drive (optional)
- Sound Card
- Speakers
- Operating System: Windows XP Professional (not Home Edition)

NCR 7402-1010 Web Kiosk:

- 12.1 or 15 inch monitor
- Magnetic Stripe Reader (uses NCR OPOS)
- Model 7342-F306 Printer (uses NCR OPOS)
- Multimedia Speakers
- See more detail at: <http://www.ncr.com/en/products/hardware/hardware.htm>

IBM NetVista Kiosk:

- Swecoin Printer (using OPOS)
- Magnetic Stripe Reader
- See more detail at: <http://www2.clearlake.ibm.com/store/product/html/kiosk.html>

Custom Assembled Kiosk:

- A kiosk can be assembled using custom enclosures
- Must use only peripherals from supported list

Supported Peripherals for Kiosks

The following list is relevant for Vista Version 3 of the Kiosk (.NET version) and onwards.

Printers:

Connection Type: Serial.

Only these models are supported.

Models:

- NCR Printer model 7342 F306 Printer (via OPOS). Serial has been tested
- Star TSP700 & TSP800 Terminal Printer (via OPOS). Serial and USB has been tested
- Boca using Ghost writer language (eg Boca Sub ATM and Boca Mini)
- Practical Automation KTX or ITX 2000 or ITX 3000 printers or any that use the FGL language and the printer supports status monitoring

Swipe Reader:

Connection Type: Keyboard or Serial.

Models:

- Swipe readers that meet the OPOS Standard
 - Magtek Serial Swipe Reader
 - OMROM Motorised Reader V2XF Series
 - KDM Insert Reader Model 5907
 - KDM Insert Reader with Gate Model 4787
-
- If using Tender Retail Payment Gateway, it controls the external PIN Pad for debit and credit cards

Vista Kiosk only supports the use of USB Printers and Swipe readers if they are using OPOS. Vista Kiosk does not support talking to USB devices directly. Vista does not guarantee to work with any USB to serial converter as some models have been found to be unreliable.

Ticket Printer Recommendations

(This is for Vista Version 2 or 3)

The following are some recommendations:

High Volume Applications:

- Boca Mini 42.
- This printer is suitable for dedicated box office POS in a high volume cinema.

Medium Volume Applications:

- Boca Micro 42.
- Suitable for most medium box office applications.
- Boca Sub Micro 42.
- Suitable for most medium box office applications and especially useful where space is a premium.
- Boca Sub Micro 22.
- Similar to the 42 but at 8 inches per second and no Asian font capability.
- Zebra Stripe S400, S500 or S600 with cutter.
- Really a label printer but does a great job at ticket printing.

Low Volume Applications:

- Epson TMT-88 or 90.
- Suitable as a low volume ticket printer, used in non-dedicated ticket sale positions such as candy bar or food counter where intermittent ticketing is required.
- IBM 4610.
- Similiar printer to Epson TMT-88.

For more detail on Boca Printers see:

<http://www.a1megatek.com/> or <http://www.bocasystems.com/>

For more detail on Epson Printer see:

http://pos.epson.com/pointofsale/station_printers/tmt88ii/

For more detail on IBM printer see:

http://www.raleigh.ibm.com/rds/marcom/html/0118_4610.html

For more detail on Zebra printers see:

<http://www.zebra.com>

Other printers supported include:

- Practical Automation
- Sebel

- Star
- Datamax

BackOffice and HeadOffice Client Recommendations

(This is for Vista Version 2 or 3)

The following are some recommendations:

The BackOffice and HeadOffice client computers are just a standard office PC setup. Nothing out of the ordinary is required, just Windows on an Intel PC.

A laser printer suited to the volume of reporting planned is also required.

Some suggestions:

- HP Laserjet 6P printer.
- Xerox Able 1321 (This is a photocopier/fax as well used by larger cinemas).

The number of PC's is dependant on the number of Personnel involved.

If a ticket booking function is intended to be run from the back office than a ticket printer may be required to attach to those PCs.

The following are some recommendations:

Minimum PC Specification for BackOffice computer:

- Computer Pentium III, 128 Mb Ram, 6Gb Hard Disk
- SVGA colour monitor
- CD Rom
- Network Connection
- Microsoft Win 98, Win 2000 Pro, Win XP Pro
- Microsoft Office (not required, but Vista Cabinets can export to MS Excel and Infoworks requires it on Headoffice Client computers).
- SQL Client Licence
- Antivirus Software eg Nortons or McAfee

Minimum Requirements:

For those sites with have existing older hardware, we generally advise that you meet at least the minimum required of the operating system:

Windows XP:

- Computer with P233 MHz or faster processor (500MHz and above is preferred).
- 128Mb RAM
- 6Gb of disk space

Windows 2000:

- Computer with P166 MHz or faster processor (500MHz and above is preferred).
- 128Mb RAM
- 6Gb of disk space

Windows NT:

- Computer with P166 MHz or faster processor (500MHz and above is preferred).
- 128Mb RAM
- 6Gb of disk space

Windows 98:

- Server with P166 MHz or processor (500MHz and above is preferred).
- 128Mb RAM
- 6Gb of disk space

Operating Systems

Windows XP Professional should be used, not Windows XP Home, due to limitations with network support

MobilePOS Recommendations

Software Requirements:

- Requires a Pocket PC.
- Running the Pocket PC 2002 Operating System or Higher.

Minimum Hardware Requirements:

- Pocket PC with 206Mhz Processor.
- 32MB RAM.
- 802.11b Wireless LAN Capable.
- Compact Flash Card Slot to Connect Printer.
- Serial Printer with Integrated Card Reader (Required for Credit Card Transactions).
- Serial Compact Flash Card and Serial Cable.
- 802.11b Wireless Access Point.

Example Hardware:

- Compaq H5550 Pocket PC.
- Integrated Wireless LAN 802.11b.
- 48 MB ROM, 128MB RAM.
- 400 MHz Intel Xscale Processor.
- Compaq H5550 Expansion Pack (For Compact Flash Card Slot).
- Zebra Cameo Belt Mounted Thermal Printer with Integrated Card Reader.
- SocketCom Serial Compact Flash Card.
- Belkin Wireless Access Point (F5D6130z).

Web Server Recommendations

This is the server used to support Internet Ticketing or Call Centre.

Vista Web Ticketing utilizes Microsoft Web Technology specifically Internet Information Server.

Vista recommends that the Web ticketing solution is implemented on 2 servers, one acting as a web server, the other as a database server.

If the Web server is located at a Head Office then using the a HeadOffice server as the Web database server is acceptable.

Vista does NOT recommend the use of general File & Print servers for either of these tasks.

Using the same server for ticketing server and database is acceptable with the use of higher powered servers.

Using the same server for web server and database server does introduce some security issues.

Firewalls are highly recommended for the solution. In a 2 server setup we recommend one firewall between the Web server and the IP provider and an additional firewall between the web server and the database server (especially if the database server is also the Head Office server).

Web Server (Minimum Specs):

The emphasis on the Web Server is processor and memory performance:

- Server, with at least Pentium III 1GHz
- 512 MB Memory minimum
- 2 x 9.1 GB Disk (9.1 GB Mirrored)
- CD-ROM
- Tape Drive
- Windows 2000 Server - processor license
- Microsoft Internet Information Server (IIS)
- Antivirus Software eg Nortons or McAfee

Database Server (Minimum Specs):

The emphasis on the Database server is Disk and Memory performance:

- Server with minimum of Pentium III 1GHz
- 1Gmb Memory
- 4 x 9.1 GB Disk Raid Protected
- Tape Drive
- Windows 2000 Server - processor license
- Microsoft SQL Server 2000 - processor license

Web Server (Recommendations):

The emphasis on the Web Server is processor and memory performance:

- Server 2.6GHz Dual Processor
- 2-4 Gb Memory minimum
- 2 x 9.1 GB Disk (9.1 GB Mirrored) Minimum 720rpm
- CD-ROM
- Tape Drive
- Windows 2000 Server - processor license
- Microsoft Internet Information Server (IIS)
- Antivirus Software eg Nortons or McAfee

Database Server (Recommendations):

The emphasis on the Database server is Disk and Memory performance. Houses the VISTAIT database which is fairly small but accessed frequently:

- Server 2.6GHz Processor
- 1.5Gmb Memory
- 4 x 9.1 GB Disk Raid Protected, Minimum 720rpm
- Tape Drive
- Windows 2000 Server - processor license
- Microsoft SQL Server 2000 - processor license

If a single server installation is required then adding extra memory to the database server will give a possible performance improvement. Selecting a server with dual processors would also help in this instance.

IVR Server Recommendations

Hardware:

- Server with minimum PIII 500 MHz
- 512Mb RAM
- RAID SCSI Controller card
- 2 x 9.1 GB 10K rpm hard disks (mirrored)
- CD Rom

Make sure the computers hardware slots can support the size/type of the Dialogic card being installed eg PCI. These cards can be very long.

Telephony Card:

One of the following:

- Dialogic D/300PCI-E1 Board (if the countries ISDN protocol is E1)
- Dialogic D/240PCI-T1 Board (if the countries ISDN protocol is T1)

Software:

- Windows 2000 Server
- Show-N-Tel Runtime Licences (SNT 4.5.1) - Supplied by Vista Entertainment
- CoolEdit 2000
- Antivirus Software eg. Nortons or McAfee

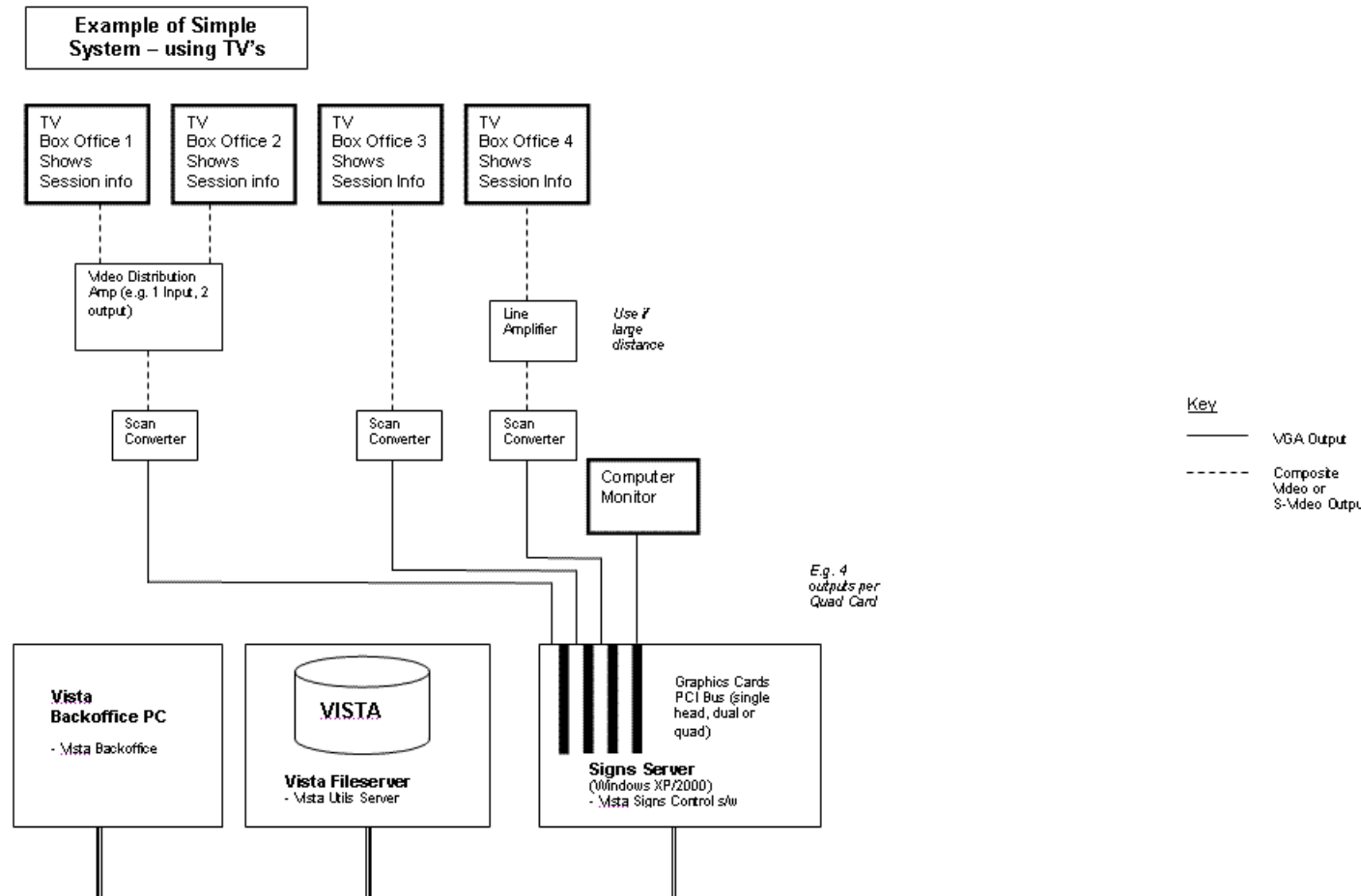
NOTE: Communication protocols must be reviewed at each installation as these differ from country to country.

These protocols also change when the server is installed behind a PABX.

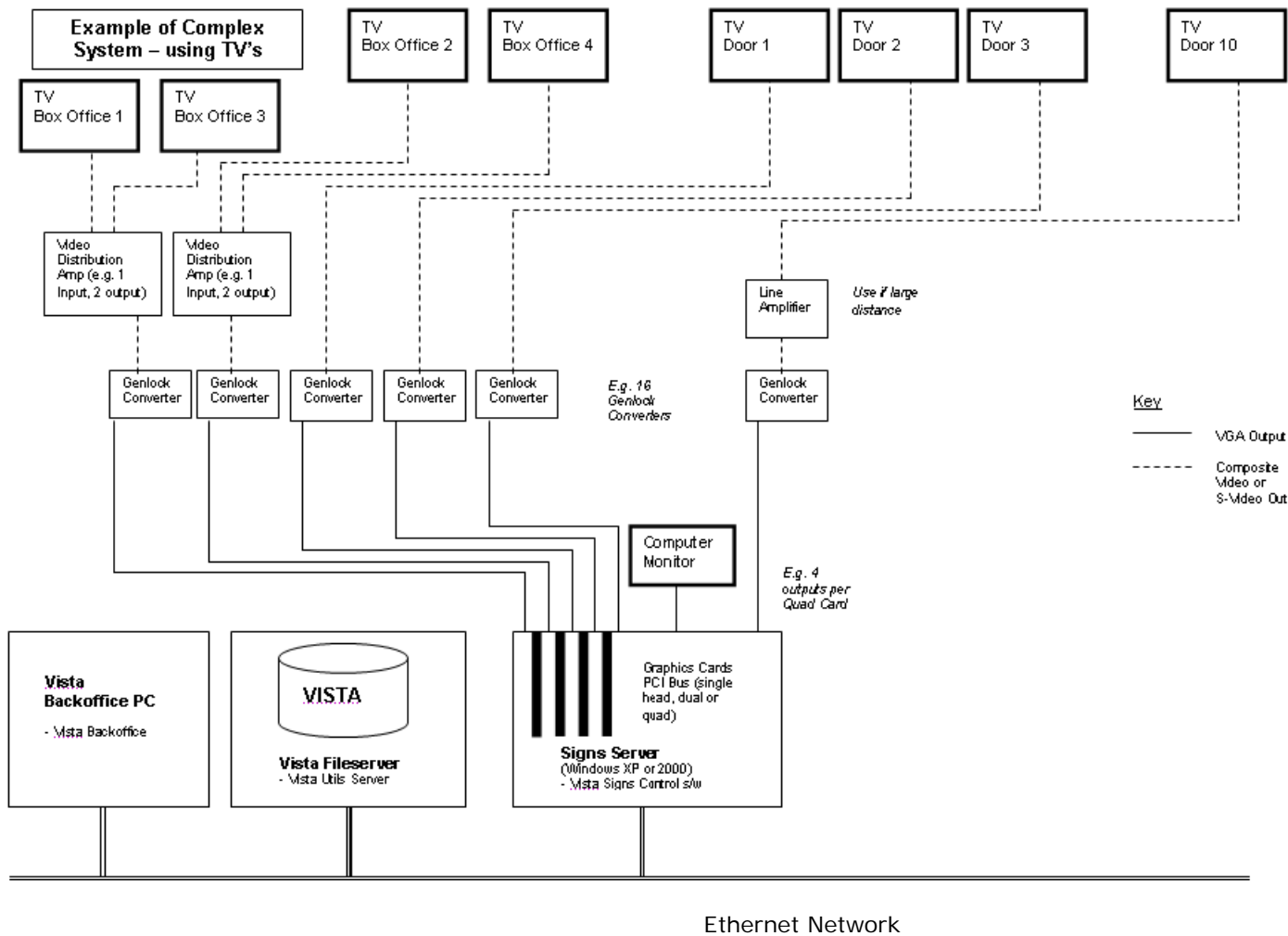
Based on the country the telephony card will either be E1 or T1.

Hardware Concepts for Plasma Modules

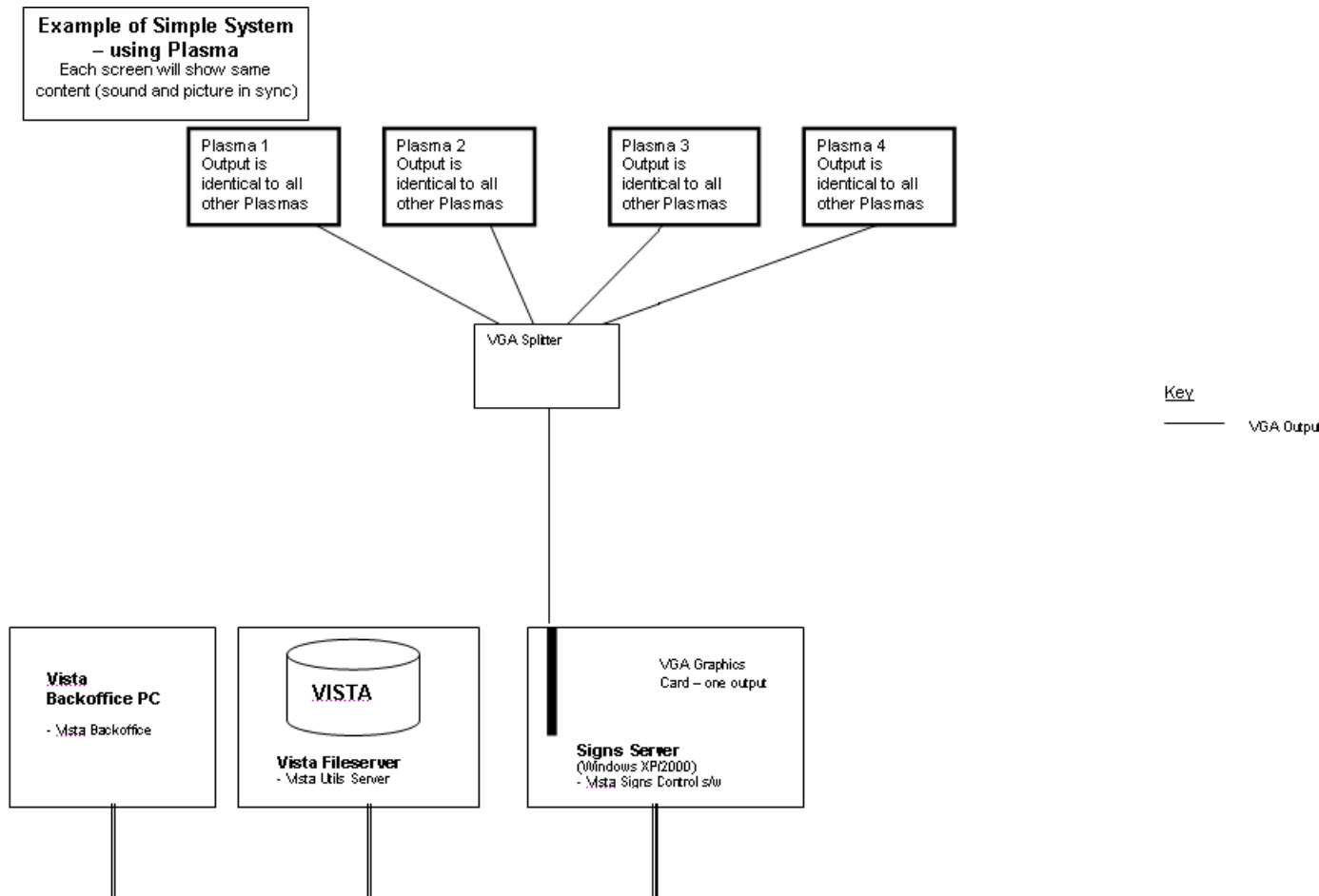
Example of a Simple System Using TV's



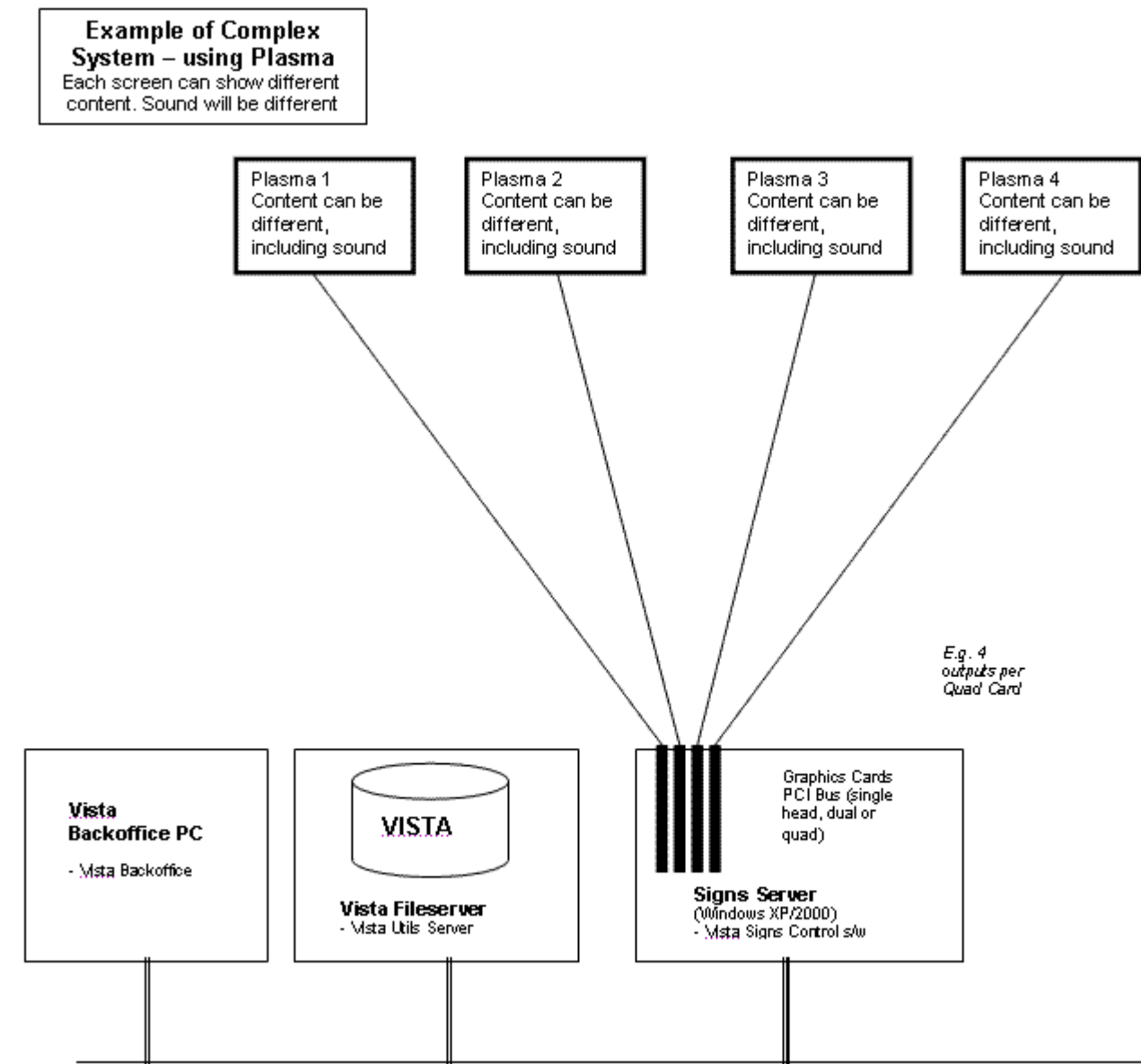
Example of a Complex System Using TV's



Example of a Simple System Using Plasma



Example of a Complex System Using Plasma



Signs Servers

- You need to have at least one computer dedicated to displaying text on the Plasmas/TV's. This is called the **Signs Server**. The Vista Plasma Signs software must not run on computers used for any other purpose. For instance, do not run on the Cinema File Server.
- If you have more than one VGA card, then further processor and memory is required in the Signs Server.
- To allow a Signs Server to communicate with more than one Plasma or TV, you will need a graphics card with more than one output (i.e. a Dual graphics card, which provides 2 outputs or a Quad graphics card, which provides 4 outputs). It should be noted that only one Dual card can exist by itself in a Signs Server. There is frequently a limited number of outputs (channels) that are available when more than one Quad card is installed (i.e. 10 or 16 outputs only). However, this does depends on the brand of card.

- If you want to use more outputs (channels), you may need more than one signs Server to divide the workload.
- Another reason for having more than one Signs Server is to reduce cabling and in doing so reduce the risk of long cabling deteriorating the picture quality.
- Playing MPEG files requires a lot of processor and memory. Unless you have very powerful computer controlling the Plasma/TV's you may want to have a seperate computer control each Plasma that will play a different MPEG file at once, otherwise the trailer may pause from time to time when being played. TV's and Plasma's that will not play MPEG files do not take up much resourse so can conexist with an output which will show MPEG
- With more VGA outputs available, processing and memory recognition will work much faster. The computer also needs a very good cooling system as it will get hot.
- NB: The bus type of the computer is very important – find out what type of VGA cards you will use and buy the correct bus type (PCI or AGP).

Hardware Concepts

Video Output Methods:

In order of quality (from worst to best):

- 1 Composite Video
- 2 S-Video
- 3 Component Video (also know as YUV)

Composite Video is located on most items e.g. DVD's, Monitors etc.

S-Video is normally now available on DVD's and the larger monitors.

The formats can be mixed e.g. use S-Video out of the DVD player, but Composite Video to the Plasma or TVs.

Graphics Cards (for Graphics Server):

A graphics card is the card in a computer that drives your computer monitor (i.e. a VGA card).

Each graphics card output (VGA) has one channel. Cards can be purchased with 2 outputs (i.e. 2 channels), called Dual cards and 4 outputs (i.e. 4 channels) called a Quad card.

There will need to be 1 graphics channel, for each different text output.

Example:

If there are 6 cinema screens then 6 graphics channels are required.

If the session information is to be displayed over 2 monitors before repeating the information on other monitors, then 2 graphics channels are required.

Total being 8 graphics channels (for the above example).

Video Distribution Amplifiers:

A Video Distribution Amplifier (DA) is a video splitter, that has a number of video inputs and a number of video outputs.

E.g. 1 input, 16 outputs.

This could be used to have 1 video source e.g. DVD player and send the same signal to 16 Plasma or TVs.

Genlock Converters:

A scan converter, converts graphics i.e. VGA output to Composite Video (AD).

The Genlock converter required by the system is one that is a Scan Converter and also does Text Overlay all in one (Scan Converter cannot do Text Overlay, hence only Genlock Converters should be used).

The text overlay combines the graphics card output with the video output, so the graphics appear on top of the video.

Not all Genlock Converters do text overlay, some only do Video Overlay.

You must use a Genlock Converter or a Scan Converter for each graphics channel, even if you do not plan to display Video (as the VGA needs converting to Video output of some sort).

The Inputs are:

VGA (from the graphics card).

Composite Video (from the Video card/DVD player etc).

S-Video (from the Video card/DVD player etc).

The Outputs are generally:

Composite Video.

S-Video.

Component Video (sometimes).

VGA (to a computer monitor for testing purposes).

Line Amplifiers:

A line amplifier boosts the composite video signal over large distances.

Plasma or TVs:

Can be Composite Video, S-Video, RGB or Component Video.

On computer monitors, Component Video (YUV) is also sometimes called RGB.

It is not recommended to use RF as this would mean converting the signal from Composite Video and this method would deteriorate more rapidly.

Make sure the Plasma or TVs has input for either:

RGB (DB-15 plug, same as VGA so a computer can be plugged straight in without the need for a Genlock converter).

Composite Video.

S-Video.

Technical Details

Graphics Cards:

The Operating System for the Signs Server must be Windows XP or Windows 2000, which has the ability to send different text to different VGA cards (and hence different monitors).

Suggested Brands of Hardware:

- Matrox Quad Graphics Card (either called the G-200? or G-400?)

- Appian Jeronimo Pro (quad)
- Aston Quad Cards

The Matrox brand is a well known brand, but the Quad version is very difficult to get.

There should not be a mix of graphics cards in a computer, they should be the same brand and preferably the same type. Problems are likely to occur if this is not the case.

This system is designed to be able to have several VGA card's in a computer at the same time, hence they must be PCI Bus type and not AGP Bus type.

Most graphics cards that are PCI are full-length cards, so the server must support enough full-length PCI cards.

VGA output is DB15HD – 15 pin high density.

Additional Hardware Details

Video Distribution Amplifiers:

Suggested Brands of Hardware:

- Kramer (make large variety of input/output combinations).

Some Distribution Amplifiers are Audio/Video, while others are Video only.

If you require Audio, either buy a Audio/Video DA or buy 2 x Video DA's the same size and split the wiring so one DA is for video, the other for audio.

If you need a 1 to 16 Distribution Amp and it is Video only, you can buy 2 of them as the signal is coming in as 4 wires. You can then rewire to split them off, 2 to one and 2 to the other DA.

Switches:

A Switch, e.g. the Matrox Switch is just a fancy Distribution Amplifier, e.g. 3 inputs and 6 outputs, but with a RS-232 port on that the input/output can be controlled.

You could instead buy a DA as these do not cost very much more and the system could later be enhanced to utilise this function.

This would allow the manager to control what video or video and graphics output was on each Plasma and enable changing of it (i.e. school holidays when have different queuing arrangement).

Genlock Converters:

Suggested Brands of Hardware:

VineGen 2

VineGen Pro

These are all consumer and not professional products, but generally the quality is similar.

Cabling and Plugs

Generally, it is possible to send Composite Video via 75 ohm cable anywhere in a large building, but you may need Line Amplifiers from time to time (length unknown).

There needs to be one 75 ohm cable for Video and one for Audio.

S-Video is generally up to 15 meters, but could possibly extend further.

General Rules when using Composite Video equipment:

- Professional Equipment: Usually uses BNC connectors.
- Consumer Equipment: Usually uses RCA connectors.

BNC to RCA conversion plugs/cables and vice versa are available.

Cables to Plasma or TVs are 75 ohm coax cable, normally with BNC on them (for composite video).

The Audio & Video run through the building on separate Coax cables. They can be combined together onto one coax cable by using a Multiplex device. Special Multiplexes can be used if fibre optics is used.

A distance of about 100 meters should be easily obtained without Line Amplifiers.

Earth Isolator:

Hum Bars are where there are scrolling line on the Plasma or TV.

It is caused when the electrical cable has different earth potential. It can happen due to voltage or Hertz drop.

It is recommended that cable lengths are not too long and cables are kept clear of obstacles (e.g. fluorescent lights). They may not be a problem initially until new equipment is installed into a cinema, maybe on the same power cable.

The cabling company must be careful when laying cables. This can be achieved by using an Earth Isolator on each end of the long cables (i.e. put an 'Earth Isolator' on the end where it leaves the Video Distributor Amp and another on the Plasma or TV end).

It only needs to be put on Video cables.

Kramer OC-1N Optical Video Isolator.

As there is no way of knowing if an Earth Isolator is required or not, it should be mentioned as a possible option.

Using UTP Cat 5 Cable:

A Video Line Transmitter/Receiver can be used at each end to take Coax and convert it to UTP. It needs reconverting back at the other end.

This will combine both Audio and Video coax together to send through the cable.

Audio:

When there is more than one Plasma, if the content is not played at the same time to each plasma (i.e. Trailer A is being played on Plasma 1 and Trailer B is played on Plasma 2), the sound will not be synchronised. It is advisable that the audio is turned off any Plasma which plays different content, close to other Plasmas.

Sign Control Hardware Recommendations

Two types of display signs are supported with Vista, LED signs and Plasma/TV Monitors:

LED Textlight Signs:

Two methods of controlling the LED signs exist:

- Direct Connect from the Vista Cinema Server
- Via an LED Textlight control PC running LED control software

Direct Connect:

A limited number of signs exist that can interface directly with Vista. The Vista Display software runs on the cinema fileserver, so the only requirement is that there is a serial port(s) to support the server being connected to the signs.

- Active Moving Signs <http://www.activesigns.co.nz/>
- Jayex <http://www.jayex.com>

Via an LED Textlight Control PC:

The most common way for Vista Display to run is where it creates an ASCII text file that is read by a third party software that controls LED textlights. The third party software that controls the signs must be run on a separate computer that does not run other Vista software. See the supplier of the software for hardware requirements.

Vista outputs a standard 'BLOAD' file which many manufacturers can read:

We have worked with a number of providers:

- Multimedia LED <http://www.multimedialed.com/>
- Computronics <http://www.computronics.com.au/index.html>
- Data Display <http://www.data-display.com/datadis/asp/section.asp?lng=eng&s=1>

Plasma/TV Monitors:

A computer with one or more graphics cards is required to drive the Plasma/TV monitors.

Ideally the TV monitors should have RGB inputs.

PC screens can be used in place of the TV monitors

The graphics card should be something like a Matrox dual or quad card.

The computers that have these cards must have as much memory and processor power as possible. The more output channels, the more memory and processor power needed.

If it is required to overlay text and Video then a Genlock converter is required for each monitor.

If one Image is required to be displayed over several monitors then a video splitter is required.

If the distance of transmission is large (>50 metres) then line amps may be required.

Signs Server:

- Computer with 1GHz or faster processor (2-3GHz would be much better)
- 512Mb RAM or more
- 6Gb of disk space (may need a lot more if holding lots of MPEG files eg 40Gb)
- SVGA colour monitor
- DVD drive
- Enough full length PCI slots graphics cards
- Good FAN for cooling if several cards
- Network Connection
- Microsoft Window XP or Windows 2000
- SQL Client Licence
- Antivirus Software eg Nortons or McAfee

Minimum Requirements:

While the software will work with these minimums, it is highly advised to have as faster processor and as much memory as possible. If you plan on playing trailers you require a lot of harddisk eg 40Gb

Windows XP:

- Computer with 1GHz or faster processor (2-3GHz and above is preferred)
- 512Mb RAM (1-2Gb is preferred if showing trailers)
- 6Gb of disk space (40Gb or above is preferred if showing trailers)

Windows 2000:

- Computer with 1GHz or faster processor (2-3GHz and above is preferred)
- 512Mb RAM (1-2Gb is preferred if showing trailers)

- 6Gb of disk space (40Gb or above is preferred if showing trailers)

HeadOffice Database Server Recommendations

(This is for Vista Version 2 or 3)

The following are some recommendations for all database servers at HeadOffice, for instance:

- HeadOffice Database Server
- Voucher Management Server
- Loyalty Server

Hardware and Software:

- Server with 1GHz, preferably eg 2.8GHz processor
- 256Kb cache
- 2Gb RAM eg 133 Mhz SDRAM ECC RDIMM
- Raid SCSI Controller Card
- 3 or 4 disks each 9.1 Gb 15K-rpm Ultra 16 SCSI HS HDD (for RAID 5)
- SCSI Tape Drive
- CD-ROM or DVD drive
- Monitor, Keyboard and Mouse
- UPS
- Modem to connect to phoneline (for support via dialup or over Internet)
- Microsoft Windows 2000 or 2003 Server
- Microsoft SQL Server 2000
- Antivirus software i.e. Nortons or McAfee

Minimum Requirements:

Windows 2000:

- Server with 1GHz or faster processor
- 2Gb RAM
- 9Gb of disk space, but probably a lot more

Windows 2003:

- Server with 1GHz or faster processor
- 2Gb RAM
- 9Gb of disk space minimum, but probably a lot more

Windows NT :

- Server with 1GHz or faster processor
- 2Gb RAM
- 9Gb of disk space

Loyalty Server

The Loyalty Server should have a fast processor and disk access.

Vista Loyalty software cannot reside on the same server that has any Vista Client based software eg Vista Headoffice or Vista Backoffice as if these are on a different version of the software, Vista Loyalty will not work.

Wide Area Networks Recommendations

This section is designed to assist those Cinema operators who are looking to operate a number of cinemas linked across a Wan.

Obviously the different possible setups are many and varied.

Vista operates on standard Microsoft platforms so any network protocols/standards that are supported by Microsoft are inherently supported by Vista.

Network Design:

This very much depends on the size of the operation, telecommunication costs, and the need for integration of non-Vista software.

The following Network models can be used:

Single Domain Model:

The Domain Controller is kept at a central location such as Head Office, and all cinema file servers become member servers (of the same domain) that are able to perform authentication of users etc, at the cinema level. Using this method, even if the Domain Controller is unavailable, the network is still available for normal operations.

This is the best model for multi-complex organisations where there are relatively small distances between sites (eg. all within the same city or province) and expensive telecommunications links across international boundaries are not necessary. Administrative tasks need not be duplicated across several domains using this model (eg. security).

Multiple Domain Model:

Where telecommunications links are used across longer distances the multi-domain model is recommended. Each cinema has its own domain controller and operates completely independently of any other site.

This means duplicated work in terms of network administration, and that trust relationships need to be set up between each domain and Head Office but the trade off is much lower telecommunications costs.

Network Topology and Protocols:

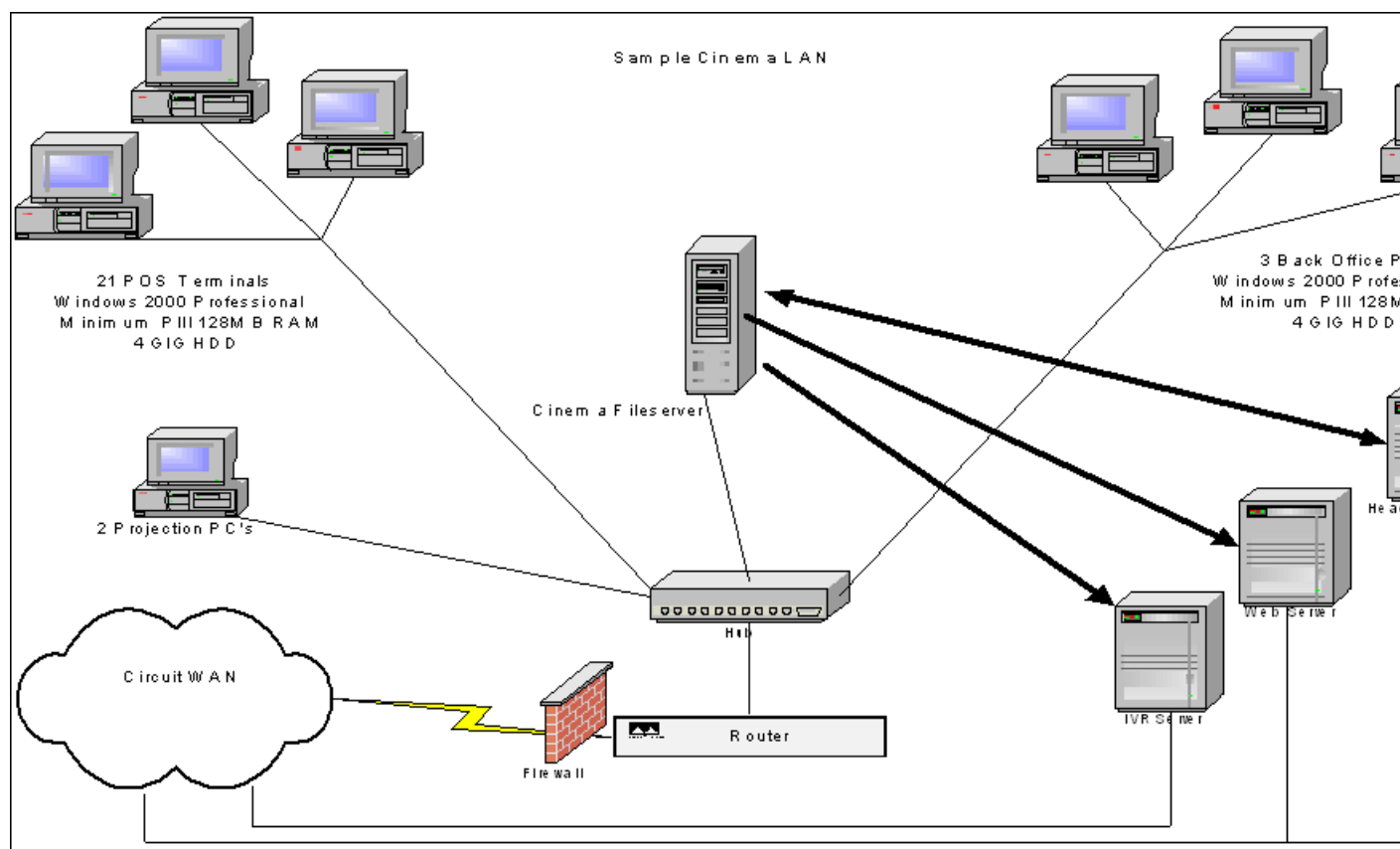
Typically networks these days use an Ethernet topology although Token Ring can be used. TCP/IP is the dominant network protocol and is required for SQL Server communications, particularly across a multiple domain model.

Bandwidth LAN (Cinema Local Area Network):

The fileserver should have at least one network adapter not less than 100mbps specification. This means that CAT 5 UTP cabling at a minimum is required.

Client workstations need to have a network adapter capable of at least 10mbps specification.

Bandwidth WAN (Circuit Wide Area Network):



CHAPTER 4

Vista Job Scheduler

Introduction:

Note: The Vista Job Scheduler is available from the V3R0 Vista BackOffice release and in Vista Headoffice V3R1

The Vista Job Scheduler application manages scheduled tasks, such as scheduled purges, SQL tasks and reports.

The application is provided in two parts; the **Vista Job Scheduler Engine**, which runs on the Vista Cinema Server, and the **Vista Client Job Scheduler** which is an user interface which resides on the BackOffice machine, to allow managers to schedule and monitor tasks.

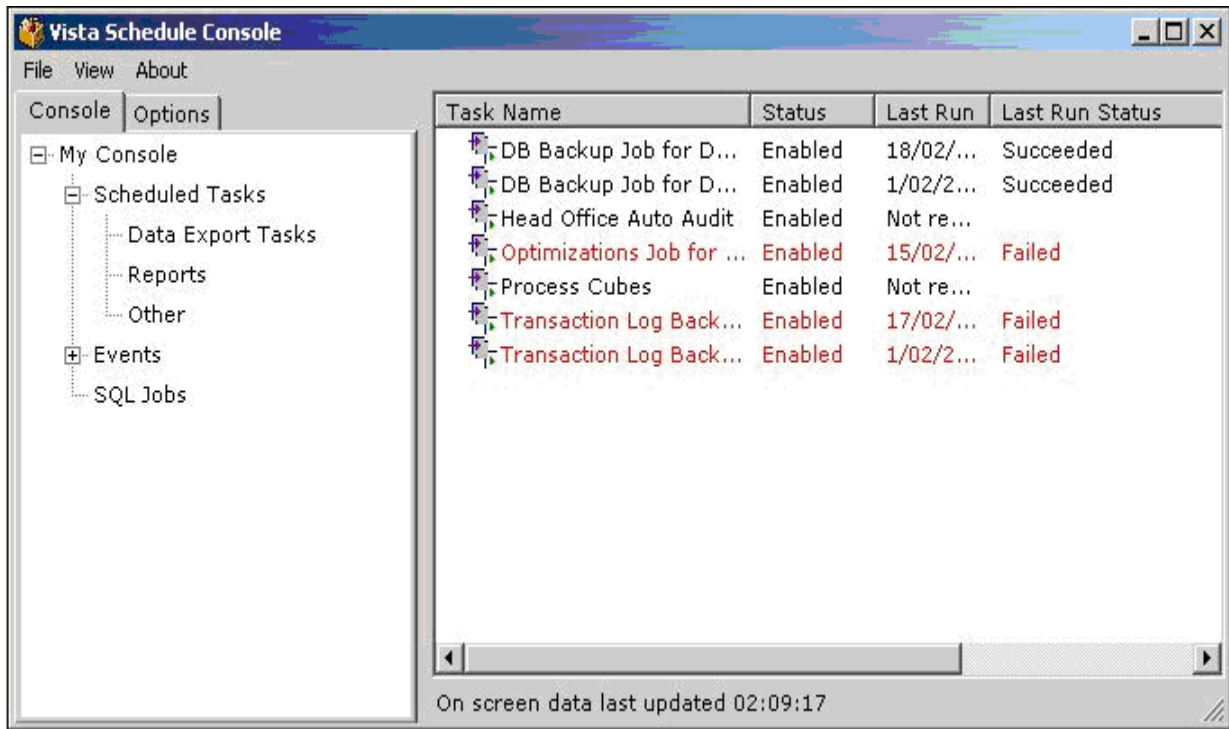
The Vista Client Job Scheduler can work with two different scheduling engines; the Vista Job Scheduler Engine and the SQL Job agent. Using the client application, Managers can schedule tasks on the Vista Job Scheduler engine (although not SQL Jobs), and can monitor all types of jobs to ensure they are completed successfully.

Currently reports can be scheduled to run with the Job Scheduler, although the database script needs to be run to create the schedule entry. In later releases of Vista, we intend to provide a Reports Schedule wizard to facilitate an easy way to add reports to the Vista Job Scheduler Engine.

Using the Job Scheduler

Job Scheduler Console:

This is the screen that you first see when you open the Vista Scheduler. There are 2 tabs on this screen: "Console" and "Options."



The Console Tab allows you to view and manage scheduled tasks and the Options Tab allows you to change the Data refresh interval, i.e. how frequently data is obtained from the SQL Server and made available to the Vista Job Scheduler Console. Normally this is set to 60 seconds (1 minute), but can be altered if required to be more or less frequent.

On the Console Tab, there are two main types of tasks that can be viewed: 'Scheduled Tasks' and 'Events.' Scheduled Tasks are Vista tasks such as backup of the Vista database, uploads to Head Office and processing of InfoWorks data cube. The scheduled tasks, status and time last run is shown in the panel on the right. Each of these tasks can be edited and/or viewed by choosing the View/Edit Job Details action from the menu. Events are SQL Server tasks which run automatically. The status of these tasks can also be seen in the same way.

Edit a Scheduled Task:

To edit any of the scheduled tasks, choose View/Edit Job Details from the Menu, or right click the highlighted task.

The screenshot shows the 'Edit Job' dialog box. At the top, the title bar says 'Edit Job'. Below it, the 'Notepad' window is open. The 'Run Event' is set to 'TIME'. The 'Job Enabled' checkbox is checked. The 'Schedule' section has three sub-sections: 'Run From' (04:00 p.m.), 'Run To' (01:00 a.m.), and 'Run Interval (mins)' (30). The 'Schedule date range' section has 'Run for date range' checked, with 'Run From' (22 January 2004) and 'Run To' (23 January 2004). The 'Next Run' is set to 22 January 2004 at 03:45 p.m. There are 'Cancel' and 'Save' buttons at the bottom.

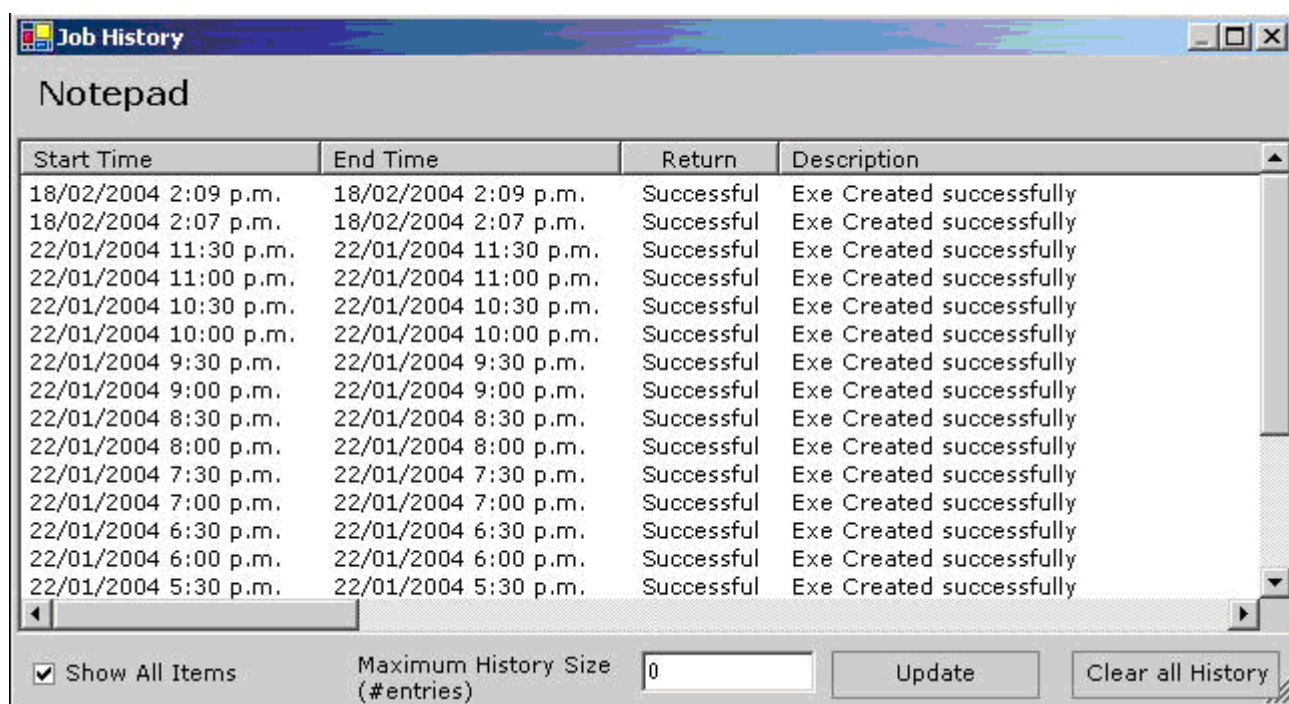
To disable the job, i.e. make the job inactive, check the tick box 'Job Enabled.' Check it again to enable the job.

To change the scheduled time that the task can run within, change the 'Run From' or 'Run To,' or the 'Run Interval.'

To change the scheduled date range that this job runs for, change the relevant dates and click 'Save.'

Scheduled Task History:

Highlight the scheduled task you wish to see history for, then choose View/Job History from the menu.



The screenshot shows a window titled "Job History" with a "Notepad" header. It contains a table with four columns: "Start Time", "End Time", "Return", and "Description". The table lists 18 entries, all showing successful execution of "Exe Created" tasks at 30-minute intervals from 5:30 p.m. to 2:09 p.m. on two consecutive days. At the bottom, there is a checkbox for "Show All Items", a field for "Maximum History Size (#entries)" set to 0, and buttons for "Update" and "Clear all History".

Start Time	End Time	Return	Description
18/02/2004 2:09 p.m.	18/02/2004 2:09 p.m.	Successful	Exe Created successfully
18/02/2004 2:07 p.m.	18/02/2004 2:07 p.m.	Successful	Exe Created successfully
22/01/2004 11:30 p.m.	22/01/2004 11:30 p.m.	Successful	Exe Created successfully
22/01/2004 11:00 p.m.	22/01/2004 11:00 p.m.	Successful	Exe Created successfully
22/01/2004 10:30 p.m.	22/01/2004 10:30 p.m.	Successful	Exe Created successfully
22/01/2004 10:00 p.m.	22/01/2004 10:00 p.m.	Successful	Exe Created successfully
22/01/2004 9:30 p.m.	22/01/2004 9:30 p.m.	Successful	Exe Created successfully
22/01/2004 9:00 p.m.	22/01/2004 9:00 p.m.	Successful	Exe Created successfully
22/01/2004 8:30 p.m.	22/01/2004 8:30 p.m.	Successful	Exe Created successfully
22/01/2004 8:00 p.m.	22/01/2004 8:00 p.m.	Successful	Exe Created successfully
22/01/2004 7:30 p.m.	22/01/2004 7:30 p.m.	Successful	Exe Created successfully
22/01/2004 7:00 p.m.	22/01/2004 7:00 p.m.	Successful	Exe Created successfully
22/01/2004 6:30 p.m.	22/01/2004 6:30 p.m.	Successful	Exe Created successfully
22/01/2004 6:00 p.m.	22/01/2004 6:00 p.m.	Successful	Exe Created successfully
22/01/2004 5:30 p.m.	22/01/2004 5:30 p.m.	Successful	Exe Created successfully

☒ Show All Items Maximum History Size (#entries)

The history displays the start and end time for each time the scheduled task was run, as well as the completion status.

CHAPTER 5

Vista Extract Program Generator

Introduction:

Note: The Vista Extract Program Generator is available from the V3R0 SP01 Vista Back Office release.

This new program has been created to provide a generic, customisable, process to allow extract files to be easily created, whose output can be imported into third party systems. It uses the Vista printing module to define within a template what the output will look like (this is also used by ticket printing). This new program has the following features:

- it can be scheduled using the V3R0 Job Scheduler
- it can be run from the DayEnd Wizard
- it can be manually run
- it creates a new extract file that can be customised (without requiring modifications to this program)
- it allows an existing extract file to have its output format changed easily (without requiring modifications to this program)
- different output filename styles can be specified

To define the input, a stored procedure must be created that either returns a result set or creates and populates a table. The column names must match the column names as defined in the template.

Note: For an example of creating an extract, look at Vista's 'Export Box Sales' sample extract (which is a sample stored procedure that extracts Session Sales along with a sample Template file).

The name of the SQL stored procedure, SQL table, configuration file name and all scripts should must conform to the Vista naming standards so that they do not conflict with Vista software. See the section in this manual on Vista Policy on Database Modification.

The naming convention suggests using an abbreviation of the company's name at the front of the object, e.g. xyzStoredProcedure.

Steps:

It is easier to create and install an extract at the same time so this is how the following instructions are laid out. To create an extract you must do the following:

- 1 Allow the extract to be called from the Vista Job Scheduler
- 2 Create a configuration INI file
- 3 Create a stored procedure and output table
- 4 Edit the configuration INI file
- 5 Edit the extract task in the Job Scheduler
- 6 Create a new data range

Step by step installation instructions are described below.

Step 1 - Allow the Extract to be called from Vista's Job Scheduler

- Open Query Analyser on the file server
- Connect to VISTA database
- Copy the following code as paste into Query Analyser

```
-- Populate tblProcessDefinition for "Export Box Sales"
```

```
Declare @intMaxID as INTEGER
```

```
Set @intMaxID = Convert(Integer, (Select max(Right(Process_strId,8)) from tblProcessDefinition
where len(Process_strId) = 10 and Left(Process_strId,2) = 'VS'))
```

```
IF @intMaxID is Null
```

```
BEGIN
```

```
    Set @intMaxID = 0
```

```
END
```

```
IF NOT EXISTS(select * from tblProcessDefinition where Process_strName = 'Export Box Sales')
```

```
BEGIN
```

```
    Set @intMaxID = @intMaxID + 1
```

```
    INSERT INTO tblProcessDefinition(Process_strId, Process_strName, Process_strDescription,

    Process_strType, Process_vcReportName, Process_strProgID, Process_strTriggerEvent1,
    Process_strTriggerTime,

    Process_strParamList, Process_strOutputOptions, Process_strOutFilePath ,
    Process_strEnabled)
```

```
    VALUES( @intMaxID, 'Export Box Sales', 'Export Box Sales', 'exp', NULL,

    'ExtractGenerate.CExport', 'TIME', 'Y', NULL,
    'CONFIGFILE=\\Vista\\Extracts\\ExtractConfigFiles\\visExportBoxSales.ini;DateRange=TODAY', '', 'N')
```

```
END
```

```
UPDATE tblProcessDefinition
```

```
    SET Process_strId = 'VS' + (

    cast(replace(str(Process_strId,8),' ', '0') as varchar(8)))

    where len(Process_strId) < 10
```

```
GO
```

--Update so that when insalling any records that exist and not set up are set to be enabled

Update tblProcessDefinition set Process_strEnabled = 'Y' where Process_strEnabled is NULL

GO

- Replace 'Export Box Sales' with the name you'd like to call your extract.
- Run the script. The extract job in the scheduler will be disabled by default (when we run the extract we will change this some more but through the Scheduler interface instead).

Step 2 - Create a Configuration INI File

- 1 The default directory to create this in is 'D:\Vista\Extracts\ExtractConfigFiles\' but you can create it anywhere you like as we will adjust the Job Scheduler job later on and set this path. (It's probably a good idea to keep all your extract configuration files in the same place). Create this path if it does not exist.
- 2 Create a new text file in this folder with a name that starts with your company name and ends with .INI
- 3 Copy the following code and past it into your newly created ini file and save it.

*[General]**StoredProc=spRptExportBoxSales**OutputTable=tblRptExportBoxSales*

;Defines whether the SP puts the results in the "OutputTable" or returns them directly

;Put "Y" if the SP returns results directly

;Put "N" if the SP puts results in "OutputTable"

UseSpResultSet=N

;Parameter list to be passed to the stored procedure

;Parameters are separated by a ";" symbol

;Vista will swap out "StartDate" AND "EndDate" with the appropriate dates for the extract range

;Any other parameters required by the stored procedure can also be added

*StoredProcedureParams=StartDate;EndDate; Cinema_strCode**StoredProcedureParams=StartDate;EndDate*

;Use any of the following file location syntax

*OutputFileLocation=\\SERVERNAME\Vista\Extracts\ExtractResults**OutputFileLocation=..\\Vista\Extracts\ExtractResults**OutputFileLocation=D:\Vista\Extracts\ExtractResults**ArchiveFileLocation=D:\Vista\Extracts\ExtractResults\Archive**OverwriteExistingFile=Y**[DATERANGES]*

;A date range can be specified in the output options for an extract

;Custom date ranges can be created here

;

;Structure:


```
;"|" then DATERANGE_NAME then ":" then "StartDate=" then an integer
```

```
;then ",EndDate=" then an integer then ";
```

```
;The integers will be used to add/remove days from the day we are running the extract for
```

```
;Eg. "|DAY_BEFORE_YESTERDAY:StartDate=-2,EndDate=-1;" will run extract for one day only, two days before the day we are running this job on.
```

```
/4WEEKS:StartDate=-28,EndDate=-1;
```

```
; -----
```

```
; -- Madprinting data below here
```

```
; --
```

```
; -- IMPORTANT - Parameter names are case sensitive.
```

```
; -- If one of your columns is not being output or
```

```
; -- formatted correctly make sure the spelling and case
```

```
; -- is exactly correct!
```

```
; -----
```

```
[OUTPUTFILENAME]
```

```
; -- Put the name for the extract output file here, followed by a ";
```

```
;By putting any column name from tblCinema in angled brackets
```

```
;it will swap the column name for the appropriate information in that table for this cinema
```

```
;eg. <Cinema_strBranch> or <Cinema_strReportData1>
```

```
;Also, putting "<BUSINESSDATE>" in the filename will be swapped out for the business
```

```
;date we are running the extract for.
```

```
BoxSales_<BUSINESS_DATE>_<Cinema_strBranchNo>.txt;
```

```
[ARCHIVEFILENAME]
```

; -- Put the name for the extract output file here, followed by a ";"

; By putting any column name from tblCinema in angled brackets

; it will swap the column name for the appropriate information in that table for this cinema

; eg. <Cinema_strBranch> or <Cinema_strReportData1>

BoxSales_<BUSINESS_DATE>_<Cinema_strBranchNo>.txt;

[DEFINITIONS]

{CLRF}=013010

[FORMATS]

; FileName

{BUSINESS_DATE}=YYYY/MM/DD

; Header

{BOS_dtmDate_From}=YYYY/MM/DD

{BOS_dtmDate_To}=YYYY/MM/DD

{EER_strCinemaName}=PADLEFT(30)

{EER_strBranchNo}=PADLEFT(10)

; Detail

{BOS_strFilm_Title}=PADRIGHT(50)

{EER_strFilmHOCODE}=PADRIGHT(10)

{BOS_strDistributor_Name}=PADRIGHT(50)

{BOS_dtmSession_Date_Time}=YYYY/MM/DD

{BOS_bytScreen_Num}=000

{BOS_curComplimentary_Ticket_Qty}=0000

{BOS_curTotal_Paid_Admits}=0000

{BOS_curTotal_Ticket_TaxTotal}=0000000.00

```
{BOS_curTotal_Ticket_Gross}=0000000.00
```

```
{BOS_curTotal_Ticket_Net}=0000000.00
```

```
{BOS_strCinema_Operator_Name}=PADRIGHT(35)
```

```
{EER_strSessionType}=PADRIGHT(2)
```

```
; -----
```

```
; -- Template starts here
```

```
; -----
```

[SECTION1]

```
<BOS_dtmDate_From> - <BOS_dtmDate_To> <EER_strCinemaName> <EER_strBranchNo>;
```

[SECTION2]

```
<BOS_strFilm_Title> <EER_strFilmHOCODE> <BOS_strDistributor_Name>
```

```
<BOS_dtmSession_Date_Time> ;
```

```
<BOS_bytScreen_Num> <BOS_curComplimentary_Ticket_Qty> <BOS_curTotal_Paid_Admits> ;
```

```
<BOS_curTotal_Ticket_TaxTotal> <BOS_curTotal_Ticket_Gross> <BOS_curTotal_Ticket_Net> ;
```

```
<BOS_strCinema_Operator_Name> <EER_strSessionType>{CRLF};
```

Note: If a comma delimited output is required, then insert a comma between each field shown above in Section 2.

We will leave this file as it is for the moment, and will come back to edit it after creating a stored procedure and output table.

Step 3 - Create a New Stored Procedure

Before creating a new stored procedure you must read the Vista Manual 'Vista policy on Database Modifications' as it explains the naming convention you must use when creating tables and stored procedures so they do not conflict with any that Vista create in the future. The naming convention suggests using an abbreviation of the company's name at the front of the object, e.g. xyzStoredProcedure.

There are two ways to do this:

- Create a stored procedure which returns an output table which is read for the extract, or
- Create a stored procedure which populates an output table with data which is read for the extract.

Option 1 - Create a Stored Procedure and Output table

- Create a script for creating the table and the stored procedure. Put a clause that if the table or SP exists, then drop it before attempting to create. Call the script the same as the stored procedure name, eg "xyzspRptExportBoxSales.sql" (this is how the Vista "Export Box Sales" extract is done, so look at that for a working example of this method).

1 Create the Output table

- Name this table "xyztblRpt*" where "*" can be anything. Naming it this way allows us to see at a glance that this table's data is temporary and is always deleted before being repopulated.
- Must have at least 2 columns:
 - SECTION varchar(30) /* So can split data into sections */
 - SEQ int /* Used for ordering the result set */
- Plus any columns to be used in the extract

1 Create the Stored Procedure

- Name this the same as the table except prefixed with "xyzsp" not "xyztbl" so for example if the output table is "xyztblRptExportBoxSales" then the stored procedure should be called "xyzspRptExportBoxSales".
- First delete the data from the output table (as will contain previous extract data)
- Get information required and insert into the output table.
- You should supply an "SEQ" for each row in the order you want the rows to be displayed in the extract file.
- You should supply a "SECTION" for each row otherwise it is defaulted to "SECTION1"

Note: What is a section?

It is a way of grouping data in the output template to determine what the output of the extract file will look like. The output template is always inside the configuration ini file for the extract.

An example of using a section would be to specify "SECTION1" and do an insert into the output table with header data. Then in the output template a section called "SECTION1" will need to exist and below it have the columns (and anything else you need) that are to be put in the header of the extract file.

- Stored procedure insert example: (Where OUTPUT_TABLE is the name of your output table)

```
/* Insert Header */
Insert into OUTPUT_TABLE (SECTION,
                          SEQ,
                          Header_strName)
Values ('SECTION1', 1, 'Test Header')

/* Insert Detail */
Insert into OUTPUT_TABLE (SECTION,
                          SEQ,
                          Detail_strName,
                          Detail_strValue)
Values('SECTION2, 2, 'Test Detail Name, Test Detail Value')
```

- 1 Run the script.

Option 2 - Create a Stored Procedure only

- 1 Create a script.

- Name it the same as the stored procedure eg. "xyzspRptExportBoxSales.sql". Put a clause where if the store procedure exists then drop it before attempting to create the SP in script.

- 1 Create a stored procedure.

- Create a stored procedure that returns a result set. Inside this result set must be the following two columns, plus any columns you want to use in the extract:
- SECTION varchar(30) /* So can split data into sections */
- SEQ int /* Used for ordering the result set */
- Name this stored procedure "spRpt*" where "*" can be anything. This is the standard naming convention for stored procedures used for extracts.

- 2 Run the script.

Step 4 - Edit the Configuration INI File

Open the configuration INI file created in Step 2 (Create the Configuration INI File), in Windows Notepad and complete the following steps:

1 Define Stored Procedure Name

- Search for "StoredProc="
- After the "=", put the name of the stored procedure you created in Step 3 (Create a new stored procedure).

2 Define Output Table Name

- Search for "OutputTable="
- After the "=", put the name of the output table, if you are using one.

3 Define if want to output to a table or not

- The output from the stored procedure can either be sent to a flat file or as a SQL Result Set
- Search for "UseSpResultSet="
- After the "=", put a "N" if you are using an output table, or if you are getting the result set straight back from the stored procedure then put "Y".

4 Define Stored Procedure Parameters

- This must match the stored procedures parameter list
- Search for "StoredProcedureParams="
- After the "=", put your stored procedure parameters, in order, separated by semi colon ";".
- "StartDate;EndDate" should already exist. "StartDate" and "EndDate" if you leave them there, will be swapped out for a start date and end date relative to the business date we are running the extract for (by the extract program), depending on the date-range we have specified in the Scheduler (which we will do soon). It is recommended that you use a start date and end date, even if you only intend on running the extract for one day, because you can still return only one day's results by using the same date for start and end. This way the extract could be used for a different date range if required to do so in the future.
- Other parameters can be added eg Cinema_strCode

5 Define Output File Location

- This defines the folder where the output file will be written to
- Search for "OutputFileLocation="
- After the "=", put the file location where you want the extract to be created. If this path does not exist then create it, otherwise the extract will fail when run with a "path does not exist" type error. Path syntax accepted:
- Full path, e.g. "D:\Vista\Extracts\ExtractResults\"
- Relative path (From where the ExtractGenerate.dll is registered), e.g. "..\Vista\Extracts\ExtractResults\"
- UNC path, e.g. "\\MACHINE_NAME\Vista\Extracts\ExtractResults\"

6 Define Archive File Location

- This defines the folder where an archive file can be written to
- Search for "ArchiveFileLocation="

- After the "=", put the file location where you want the extract to be created. If this path does not exist then create it, otherwise the extract will fail when run with a "path does not exist" type error. Path syntax accepted:
- Full path, e.g. "D:\Vista\Extracts\ExtractResults\Archive"
- Relative path (From where the ExtractGenerate.dll is registered), e.g. "..\Vista\Extracts\ExtractResults\Archive"
- UNC path, e.g. "\\MACHINE_NAME\Vista\Extracts\ExtractResults\Archive"

7 Define Output Filename

- This section defines the naming convention of the output file
- Search for "[OUTPUTFILENAME]"
- Below this we want to specify the format for which to name the extract files generated. It is a good idea to put date in the filename. e.g. "BoxSales_<BUSINESS_DATE>_<Cinema_strBranchNo>.txt;" "<BUSINESS_DATE>" will be swapped out for the business date in which we are running for.
- You can put any column name from tblCinema enclosed in angled brackets and this will be swapped out for the data kept in tblCinema. For example "<Cinema_strBranchNo>" may be swapped out for something like "10".
- All plain text will be used in the filename as is.
- We suggest using ".txt" as the file extension so it is automatically opened in notepad by double clicking it in Windows environment.
- The filename must be followed by a semi-colon, ";"

8 Define Archive Filename

- This section defines the naming convention of the output file. Do not include if you do not want to have an archive file written.
- Search for "[ARCHIVEFILENAME]"
- Below this we want to specify the format for which to name the extract files generated. It is a good idea to put date in the filename. e.g. "BoxSales_<BUSINESS_DATE>_<Cinema_strBranchNo>.txt;" "<BUSINESS_DATE>" will be swapped out for the business date in which we are running for.
- You can put any column name from tblCinema enclosed in angled brackets and this will be swapped out for the data kept in tblCinema. For example "<Cinema_strBranchNo>" may be swapped out for something like "10".
- All plain text will be used in the filename as is.
- We suggest using ".txt" as the file extension so it is automatically opened in notepad by double clicking it in Windows environment.
- The filename must be followed by a semi-colon, ";"

Output Template Sections

The rest of the sections in the configuration file are the definition, format and Section areas and are configured the same as any ticket or receipt template. See the Vista Print Template Authoring section of this manual for a full description of how to configure the template sections.

1 Set any definitions that will be used

- Some constants and other variables can be defined eg what the Carriage return and line feed characters are.
- Search for "[DEFINITIONS]"

- Below this contains definitions for syntax used in the output template. For example you will see "CRLF" already exists as "{CLRF}=013010" representing carriage return and line feed. These are the ASCII numbers eg 013 and 010. This is translated into a line feed when writing the output file. So if in one of your sections you put "<column_name> {CRLF};" it will print the data from column "column_name" and then print a line feed so the next thing printed is on the next line in the output file.

2 Define any formats

- The formats section can be used to define the format of dates eg mmddyyyy or ddmmyyyy and to pad left and right so that fields are shortened (trimmed) to fit. See the template syntax section of the print template authoring.
- Search for "[FORMATS]"
- Below this is where you format the data for output. It applies to all sections. Put the column name you wish to format enclosed in "{}" brackets followed by "=" and then the way you want to format the output e.g. "{column_name}=PADRIGHT(30)". This will format the data from column "column_name" so any values less than 30 characters will have the remainder padded right with spaces. Eg. "Lawrence of Arabia".
- **Note:** You may want to leave formatting to last and just get your output right first.

3 Define each section of the extract

- The extract file can have define formatted areas within it. eg there may be a one line summary line which is the header and then all other lines are the detail section. In this case there would be 2 sections. Section 1 would define the output format of the header and section 2 the detail area. The stored procedure must be configured to identify each section within the output.
- Search for "[SECTION1]"
- This is a section created by Vista for the "Export Box Sales" extract and contains column names required to be output in the header of that extract. We recommend using this naming convention of "[SECTION1]" "[SECTION2]" etc, however they can be anything you want.
- Create the sections you are using in your stored procedure, and below put the columns required (enclosed in "< >"), followed by a semi-colon ";" for each line.
- **Note:** Remember to get a linefeed in your output put "{CRLF}". Putting a ";" and then going to the next line in the template will not create a linefeed in the output. Each section, no matter how many lines, will be merged into one single line in the output, unless "{CRLF}" is used.

Step 5 - Edit the Extract in Vista's Job Scheduler

- 1 Launch the Vista Scheduler.
- 2 Expand 'My Console'.
- 3 Expand 'Scheduled Tasks'.
- 4 Click on 'Data Export Tasks'.
- 5 In the right hand panel, you should be able to see the new extract you created (if it does not show then review Step 1 (Allow the Extract to be called from Job Scheduler), as an extract must have "Process_strEnabled" set to "Y" in tblProcessDefinition to show up).
 - Right click your extract and click 'Edit Job Details'.
 - A new window should open, click on the 'Job Settings' tab.
 - In the 'Output Options' you should have something like:
'CONFIGFILE=\\Vista\\Extracts\\ExtractConfigFiles\\visExportBoxSales.ini;DateRange=Today';
BusinessDate=;
 - Change the "CONFIGFILE" path to point to the configuration INI file you created in step 2. of this document.
 - Supported path formats:
 - e.g. Full Path 'D:\\Vista\\Extracts\\ExtractConfigFiles\\visExportBoxSales.ini'
 - e.g. UNC Path '\\machine_name\\Vista\\Extracts\\ExtractConfigFiles\\visExportBoxSales.ini'
 - e.g. Missing drive letter '\\Vista\\Extracts\\ExtractConfigFiles\\visExportBoxSales.ini'. The drive letter which ExtractGenerate.dll is installed on will be put in from of this path to get for example 'C:\\Vista\\....' etc.
 - Change the 'DateRange' to be any of the following build in date ranges: TODAY, YESTERDAY, WEEK (Starting 7 days ago today, ending yesterday).
 - If the date range you require is not here then you can create a new one in your configuration INI file (see next step)
 - If you wanted to manually run extract for a certain date, you could set a date for the BusinessDate eg BusinessDate=03/31/2006 and set DateRange=; Then select Run Now from Job Scheduler

Step 6 - Creating a New Date Range

- 1 Open the configuration INI file created in Step 2 (Create a Configuration INI File) of this document in Windows Notepad.
- 2 Search for '[DATERANGES]'.
- 3 Below this section you can put new date ranges in the following format:
 - "|" then DATERANGE_NAME then ":" then "StartDate=" then an integer
 - then ", Enddate=" then an integer then ";"
 - The integers will be used to add/remove days from the business day we are running the extract for Eg. "|TWO_DAYS_AGO:StartDate=-2,EndDate=-2;" will run extract for one day only, two days before the day we are running for.

Scheduled Session Importer

- The Vista Scheduled Session Import program is designed to work with the Vista Film Programming module.
- This module generates flat file text files that can be read into Vista Backoffice at a cinema. These files are not downloaded from Vista Headoffice, the schedule files must be delivered to the cinema independently e.g. via email and placed somewhere on the Backoffice computer (cinema server).
- When running the Scheduled Session Import program, you are prompted for the folder where the schedule file exists. It must have an extension of .SCH, but can have whatever naming convention you like.
- There needs to be one .SCH for each Cinema, as when importing the file, you are prompted for what Cinema it is to be imported to. If a cinema has both a Traditional Cinema and a Gold Class, you would want 2 schedule files.

The fields required for the ASCII text file, require the following properties:

Field:	Length:	Example:	Comments:
Screen Number	10	1	E.g. 1 for screen 1, 10 for screen 10.
Session Date	8	20051231	In format yyymmdd e.g. 20051231 for 31 December 2005.
Session Time	4	1405	In format hhmm e.g. 1405 is 2.05pm.
Film Title	50	Casablanca	E.g. Casablanca
HeadOffice Film Code	Default is 7	CI00000001	This must match the HO Code for the film. By default this field is 7, however, you can specify another length, e.g. 10 (which is the normal length used for the Vista HO Code) by setting a header definition at the top of the schedule file (this is recommended) Header: FilmCodeLength=10;
Session Type	2	N	The Session Type Code as defined in session type maintenance, e.g. N=Normal, P=Sneak Preview.
No Free Tickets Allowed	1	0	Are complimentary tickets allowed for the session "1" means no complimentary tickets are allowed, "0" means complimentary tickets are allowed.
Film Duration	3	130	E.g. 130 minutes is the length in minutes of the film.
Trailer Length	3	10	E.g. 10 minutes is the total length of trailers and adverts.
Cleanup Length	3	15	E.g. 15 minutes is the time reserved in minutes to cleanup the auditorium.
Looped Session	1	0	If the film in this cinema is looped with another screen. 1=Yes, 0=No.
Looped Screen No.	10	5	If the session is looped with another screen, then this is the screen number it is looped with.
Headoffice Session ID	10	113948	The Headoffice Session ID, is the session ID from the system at HeadOffice that creates this schedule file. This allows HeadOffice sales to be matched back with the session from film programming.
Comments	255		Any comments for the cinema manager
Price Card Headoffice Code	10	WEEKEND	This is HO Code for the Price Card so that the correct price card can be assigned.

About the File:

This file will be text with one line per session to import, unless it is a Header parameter. Each line must contain all character, even if they are blank spaces. Otherwise the field will not be recognised as valid by the Scheduled Session Import Utility. Where any particular field does not fill the allocated length, trailing blanks should be used to make it fit the length given.

Header Parameters:*FilmCodeLength*

This currently is the only header parameter. It must be at the top of the file, By default the HeadOffice Film code is 7 characters long. Since Vista Version 2, the HeadOffice code has increased to 10 characters long.

To set the system to 10 characters, do the following:

Header:FilmCodeLength=10;

CHAPTER 6

Vista Print Template Authoring

Printer Template Test Program

The Vista Print Template Editor is used to prepare your print templates before you deliver them to VistaPOS or any other Vista product that prints a template.

This document is divided into three sections:

- Installation
- Running the Print Template Editor
- Adding New Settings to the Program

Installation

Prerequisites:

.NET Framework 1.1:

The Print Template Editor requires the .NET Framework. The version must be 1.1 or greater.

MadPrinting.dll:

The Print Template Editor also requires MadPrinting.dll to be installed and registered on this machine. This component comes down with a standard install of VistaPOS. If you need to manually install and register this .dll please find it in the following location after a VistaInstall:

<vista drive>\VISTAINSTALL\APPLIB\COMMONBASE\3.00\Common

Latest version will be found here:

<vista drive>\VISTAINSTALL\APPLIB\3.00.03\Common

(Replace ?.00?with your current version of Vista).

Folder Structure:

The folder structure that is included with alongside the program must be maintained. The program requires the following files to run:

- PrintTemplateEditor.exe
- Madprintingfields.xml
- Printertypes.xml
- Interop.madprinting.dll
- Interop.VBA.dll

Included Templates and their Folder Structure:

The basic install package includes templates for the Boca, EpsonTM-T88 and EpsonTM-T90. (You may use this program with any printer, perhaps to test its compatibility with Vista, or create your own custom printer setup).

- Boca
- EpsonTM-T88
- EpsonTM-T90

Extracting the Zip File:

- Extract PrintTemplateEditor.zip to a chosen directory, making sure to preserve folder and file structure (default in Winzip 9.0 and greater).

Running the Print Template Editor

Running the Print Template Editor for the first time:

Simply run the executable file, PrintTemplateEditor.exe

Main Screen:

The first screen you are presented with when you load the Print Template Editor:

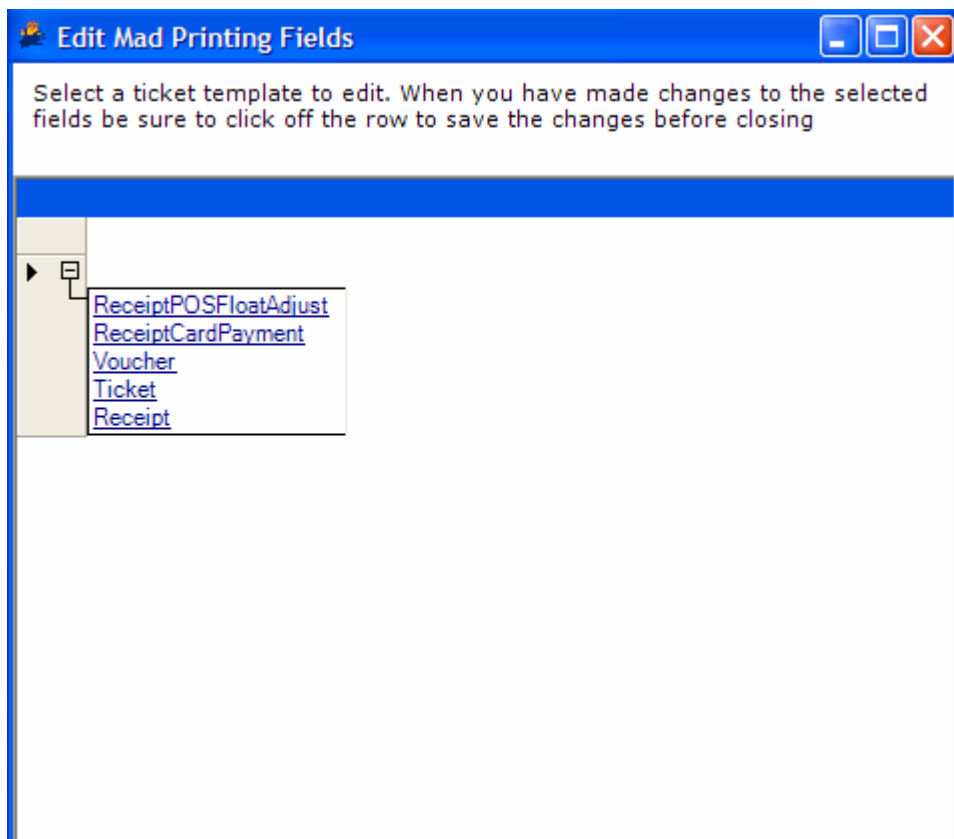


Step 1:

Edit the Mad Printing Field Values. Because we are using a test ticket template, no real database values will be gathered from any Vista Database. For example, we must provide a Cinema Name, Film Name, and Screen Number for the ticket template.

The MadPrinting Fields Editor:

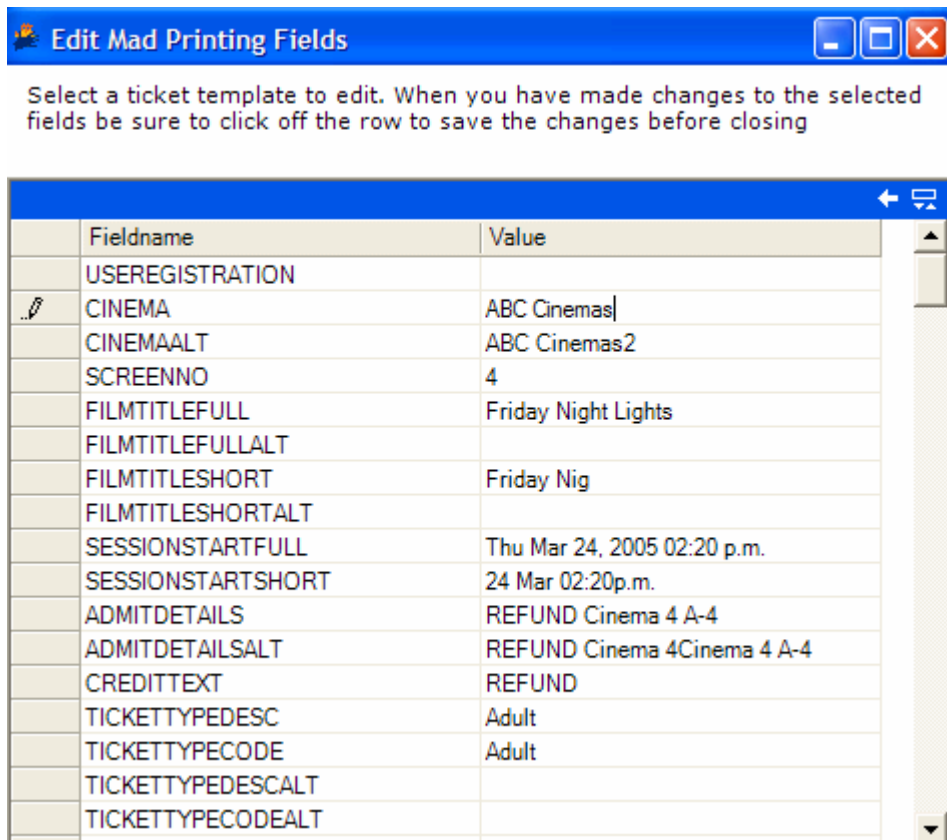
Once you have clicked on the button to edit the Mad Printing Field Values, you will be presented with the following screen:



From here you can select a template to change, and edit the field values in that template. For instance, if you want to edit the Cinema name in the ticket template you should click 'Ticket' and then locate 'Cinema.' Then you can change this value.

IMPORTANT NOTE: To save the information you must click off the row (i.e click on the direct row below the row you edited). Otherwise the information will not be saved.

After clicking on a particular ticket, the following screen will appear:



Fieldname	Value
USERREGISTRATION	
CINEMA	ABC Cinemas
CINEMAALT	ABC Cinemas2
SCREENNO	4
FILMTITLEFULL	Friday Night Lights
FILMTITLEFULLALT	
FILMTITLESHORT	Friday Nig
FILMTITLESHORTALT	
SESSIONSTARTFULL	Thu Mar 24, 2005 02:20 p.m.
SESSIONSTARTSHORT	24 Mar 02:20p.m.
ADMITDETAILS	REFUND Cinema 4 A-4
ADMITDETAILSALT	REFUND Cinema 4Cinema 4 A-4
CREDITTEXT	REFUND
TICKETTYPEDESC	Adult
TICKETTYPECODE	Adult
TICKETTYPEDESCALT	
TICKETTYPECODEALT	

Step 2:

Choose your printer settings. Please make sure these are correct, and that all your COM/LPT ports are setup correctly.

Step 3:

Select a template you wish to edit, and select 'edit this template' to edit the template in notepad. Any changes you make will need to be saved in notepad, then you can return to the print template editor and print your newly saved template.

Step 4:

Select your template to print. Push print and your template will be printed.

Adding New Settings to the Program

General Setting Addition:

All the programs settings will be found in the XML file named 'printertypes.xml.' To add a new setting that is not listed below please just browse through this file, and you will get the idea, also see examples below.

Please note that there is a group and name associated with each setting. E.g: for baudrate:

```
<baudgroup>
<baud>9600</baud>
</baudgroup>
```

Adding More Printers:

To add a printer open up 'printertypes.xml'.

Add the following:

```
<namegroup>
<name>"My New Printer Name"</name>
</namegroup>
```

You will also need to create a sub folder to contain the templates. The sub folder will be EXACTLY the same name as the printer name you placed in the 'printertypes.xml' file.

Examples:

\My New Printer Name\ticket.txt

\My New Printer Name\receipt.txt

NOTE: you will need to reload the program for these changes to take effect.

Adding More Printer Settings:

For example, Baud Rates or Com Ports

Simply do the same as in the above 'Adding More Printers' Section.

Open 'printertypes.xml'.

Example: Adding a Com Port, enter the following:

```
<portgroup>
```

<port>COM5</port>

</portgroup>

SERIAL Printers - Hardware Comms Settings

Setting Flow Control Properties to Prevent Printer Error & "Hang" Situations:

This is especially relevant to SERIAL printers. With the release of VISTA v2r7, additional features were added to Vista to enable flow control settings to be specified and used at the Vista POS end of the link.

Robust SERIAL printer operation relies on the correct combination of printer settings, Vista settings, and printer cable being used, as summarised in table below. Only the combinations listed in the table are allowed.

Serial Printer Flow Control Setting	Cable Used	Vista Flow Control Setting	Notes	Features Enabled by the Combination	
				Detects Printer Turned Off	Detects Printer Error Conditions
HARDWARE	Full-wired	HARDWARE	-	Y	Y
HARDWARE	Full-wired	(none)	(1)	-	-
HARDWARE	Part-wired	-	(1)	-	-
XON-XOFF	Full-wired	XONXOFFDSR	-	Y	Y
XON-XOFF	Full-wired	XONXOFF	(2)	N	Y
XON-XOFF	Part-wired	XONXOFF	-	N	Y
XON-XOFF	Full or Part	(none)	(3)	N	N

Notes:

- (1) This combination will NOT work – is not allowed.
- (2) This is unlikely to be chosen as the XONXOFFDSR setting is better.
- (none) is the behaviour of Vista prior to V2R7. It is still an option, but there are more reliable settings that can be chosen. (None) is typically used to troubleshoot why a serial printer is not working.
- "Full-wired" cable means a 9-25 or a 25-25 pin cable that has all pins wired through to the other end. "Part-wired" cable means a 9-25 or a 25-25 pin cable that does NOT have all pins wired through to the other end, typically just 3 pins wired through.

Where Printer Templates Reside

Point of Sale

Point of Sale Print Templates reside on the Cinema Fileserver under:

D:\Vista\VistaPOS\PrintTemplates\{name of printer}

eg D:\Vista\VistaPOS\PrintTemplatesT90\

The list of templates is as follows:

- Ticket.txt
- Receipt.txt
- Voucher.txt
- ReceiptPOSFloatAdjust.txt
- PickupCreditCardReceipt.txt
- CCReceipt.txt
- StoredValueCardReceipt.txt

Remote Devices and Applications (Kiosk\Web\Call Centre\MobilePOS etc)

Kiosk Print Templates reside on the Cinema Fileserver under:

D:\Vista\SalesSrvr\PrintTemplates\{name of printer}

eg D:\Vista\SalesSrvr\PrintTemplates\EpsonTM-T90\

- Ticket.txt
- Receipt.txt
- Voucher.txt
- BookingVoucher.txt

CashDesk

CashDesk Print Templates reside on the client computer running CashDesk:

C:\Vista\PrintTemplates\{name of printer}

eg C:\Vista\PrintTemplates\EpsonTM-T90\

- Deposit1.txt
- Deposit2.txt
- Deposit3.txt

Credit Card Receipts

Credit Card printing is handled by the Payments Module, so must reside where the Payment Module resides, ie. on each Point of Sale and Kiosk computer:

C:\Vista\PaymentsModule\

- CreditCardPayment.txt

Folder Name for Printer

The following contains the list of folders as indicated above by Name of Printer. If the printer in Workstation Maintenance is defined as Boca (Template), then the folder name of Boca will be used. Point of Sale will look in:

\\SERVER01\Vista\VistaPOS\Boca\

Printer Description	Folder Name
ATM Printer	ATMPrinter
Boca (Template)	Boca
Custom 1 (Template)	Custom1
Custom 2 (Template)	Custom2
Epson TM-T80	EpsonTM-T80
Epson TM-T88	EpsonTM-T88
Epson TM-T90	EpsonTM-T90
Epson TM-U950	EpsonTM-U950
Epson TMU Series (Template)	EpsonTMU
Fiscal Printer Epson TM-300A/F	FiscalEpsonTM-300A/F
IBM 4610 (Template)	IBM4610
Intermec UBI Series (Template)	IntermecUBI
Practical Automation (Template)	PracticalAutomation
Sebal SP200	SebalSP200
Smorgen J3900/A	SmorgenJ3900/A
Star SP4	StarSP4
Zebra Stripe S500	StripeS500
Trident TP6688 (Template)	TridentTP6688
Practical Automation uETX2002	uETX2002
Verifone (Template)	Verifone
Zebra (Template)	Zebra

Sample Printer Templates:

After Vista is installed on the fileserver (or an upgrade takes place), printer templates will be copied into:

the folders beneath: \\{Server name}\\VistaInstall\\APPLIB_INSTALL_Customisation\\

Find a folder with the type of printer you wish to use and copy the contents of the folder to the path mentioned above.

For Point of Sale templates, look first under the Vista Version 3 folder:

\\{Server name}\\APPLIB_INSTALL_Customisation\\3.00\\PrintTemplates (POS)\\{Printer name}\\

For Kiosk templates, look first under the Vista Version 3 folder:

\\{Server name}\\VistaInstall\\APPLIB_INSTALL_Customisation\\3.00\\Salesrvr\\{Printer name}\\

Credit card templates will be under the version of Vista where the Payment Connector was first released, under a folder called PaymentConnectors and the name of the Payment Connector and finally under the folder called PrintTemplate eg. for Syncro which was released in Version 3.00.

\\{Server
name}\\VistaInstall\\APPLIB_INSTALL_Customisation\\3.00\\PaymentConnectors\\PrintTemplate\\

Within Vista

This can be set up via the BackOffice Workstation maintenance. Data is entered in the same text box as the COM port speed/parity settings. After COM port settings definition, add a ':' character then add a flow control setting from the above table. After that add another ':' character and add a number, to represent a timeout value in whole seconds. If Vista detects that the printer is not "making progress" it will continue trying for this number of seconds. If the printer has not responded in some way within this time Vista will stop printing and return to the POS screen with an error message.

If you want to use a flow control setting of "None" then do not enter anything after the Baud rate settings, as in Serial port 4 below. This also means you cannot use a timeout setting for printing.

Examples:

Serial Port 1 9600,n,8,1:XONXOFFDSR:45

Serial Port 2 9600,n,8,1:HARDWARE:60

Serial Port 3 19200,n,8,1:XONXOFF:40

Serial Port 4 9600,n,8,1

You would use Serial Port 1 example when the printer is set to XONXOFF flow control, you have a part-wired printer cable and you want Vista to abandon printing if there is no progress within 45 seconds.

You would use Serial Port 2 example when the printer is set to hardware flow control, you have a full-wired printer cable and you want to wait 60 seconds for a printer response before Vista will give up printing.

Note: The Danger of having no Flow Control Setting:

- The printer can be overrun with data, causing printer comms to stop, or characters to be missing on printed tickets and receipts.
- You cannot specify a timeout setting to enable escape if the printer has an error. If there is a printer comms lang then Vista POS will hang, and the only escape MAY be to power off POS (if powering the printer off/on does not help).

Template Syntax

A ";" at the start of line indicates a comment, which is ignored during processing. Anything after ";" at any point in a line is a comment (except in DEFINITION SECTION, definition is the entire line, including any ;). During processing, all lines of info (up to ;) have trailing spaces trimmed. Blank lines are ignored.

The file is divided into sections, denoted in the following way:

[Definitions]	This section holds substitution string definitions which helps interpretation of ticket layout/print instructions in the Header, Detail, Footer sections.
[Formats]	Display fields in a defined format.
[Constants]	TBC
[CalcFields]	This section holds calculated fields incorporating literal and/or data field arithmetic. Incorporates slightly different syntax rules from the rest of the Template System.
[Header]	This section is sent to printer once before every print job of N tickets. Typically may hold printer initialise commands. Not dynamic so it is hard coded and printed on every receipt.
[Detail]	This section is sent to printer for every one of N tickets printed in a run together. In receipts starts at the end of the header section and stops at the beginning of the footer section.
[Footer]	This section is sent to printer once at the end of every print run of N tickets. Typically may hold printer terminate, FF, reset commands. Not dynamic so it is hard coded and printed on every receipt, in the same position.

The controlling program within Vista determines when each section is used (the above behave like the corresponding bands in a report writer).

Definition Section

Example: {PositionCommand} = ^RC

{PositionCommand} is a definition. In the ticket printing sections, every time you see {PositionCommand}, replace it with ^RC. The definition substitution is everything from the = symbol to the end of the line.

Special case, required typically for line printers:

If the characters after the = start with 0,1 or 2, then it is interpreted as a stream of digits, each 3 digits representing an ascii character.

Example: {PositionCommand} =027080

The string that is used for substitution is the ESCAPE character (ascii value 27) followed by a 'P' (ascii value 80).

Formats Section

Fields defined will have the format applied before printing.

Examples:

{FilmCode}	=Right(4)	BC00000114	= 0014
{FilmCode}	=Left(4)	BC00000114	= BC00
{FilmCode}	=PadLeft(12)	BC00000114	= ..BC00000114
{FilmCode}	=PadRight(12)	BC00000114	= BC00000114..
{SessionEnd}	=HH:MM	2001-12-15 10:00pm	= 22:00
{SessionEnd}	=HH:MM	2001-12-15 07:15pm	= 19:15
{ScreenNo}	=#00	002	= 02
{SessionDate}	=dddd dd mmm yy	2001-06-11 07:15pm	= Monday 11June 01
{TicketCost}	=#####0.00	12.50	= 12.50

Calculated fields:

Calculated fields can also have defined formats. The only difference is that the in the format section the calculated field must be surrounded by { } braces AND ?? delimiter pairs.

i.e. {?CalcTicketCost?} =#####0.00

Calculated field formats should match any related data field that they substitute. For example if TicketCost is recalculated for certain cinemas, define the Calculated Ticket Cost field with the same format as the data field Ticket Cost.

Constants Section

{NUMBEROFCOPIES}=2	Prints multiple copies based on the value of the number of copies. If this is not specified, 1 is assumed.
--------------------	--

CalcFields Section

The Calculated Fields section allows the creation of simple mathematic formulas to manipulate data. Calculated fields can include references to data fields, literal values and other calculated fields. The syntax rules for defining and using calculated fields are slightly different to those for the rest of the template.

Syntax rules:

Names:	Calc Field names should not be unique to all provided data field names (see appendices). In the Calc Field Definitions section names must be surrounded by {}. However, calc fields are referred to syntactically everywhere else in the template file (including in other calculated field equations) using the ? delimiter pairs.
References/Values:	To reference a data field use !! delimiter pairs: i.e. !TicketCost! To use a literal value (must be numeric) use delimiter " pairs, i.e. '2.10' To reference another calculated field use ?? delimiter pairs, i.e. ?MyCalcFieldName?
Operators:	The mathematical operators currently supported are +, -, /, *
Order of Operations:	Brackets are not currently supported. Operations are evaluated in a very simple linear order. Therefore 2+1*4 will be evaluated as (2+1)*4. To control the order of operations more exactly use nested calculated fields - but be wary of circular references (see below).
Formats:	Calculated fields can have pre-defined formats as do data fields. However the syntax for naming the calculated field in the Formats section is slightly different than for data fields (see Format Section for details).

Examples:

```
{ MyCalcField1 } =!TicketCost!+'2.10'
```

```
{ MyCalcField2 } =?MyCalcField1?+'2'*!TicketCost!
```

Important: Users should be aware that although the Vista Template Parser will raise exceptions to self referencing calc fields, it is possible to create circular references in calc fields that will create endless loops during print processing. Such an error in template design will inevitably lock and crash the system processor. 'Out of Stack Space' or similar errors will be reported to the user.

Header, Detail and Footer Sections

This section describes how to build a string of characters to send to the printer.

Same principle applies for each of the above sections, but the Header section is sent just once at the beginning, and the Footer section just once at the end of the print stream. In between, the Detail section is processed once for EACH ticket in the group to be printed.

Start with the template, remove blank and comment lines, and any trailing comments and trailing spaces.

Substitute anything enclosed in { } according to the definitions section.

Anything enclosed in < > represents a data field name describing a piece of dynamic data to place on the ticket. The <xxx> field is replaced by the data it describes. New syntax rules also allow you to identify all data fields using the ! delimiters. Using this syntax <!TICKETCOST!> will be replaced with the data value.

To reference Calculated fields include the ? delimiter pairs around the calculated field name

i.e. <?MyCalcFieldName?>

Only data field names listed in the appendices section - or calculated field names identified using ? delimiter pairs can be used in a template. Any <> field not recognisable will be printed as a literal value or cause an error during printing.

e.g. valid fields: <CINEMA>, <FILMTITLESHORT>, <?CALCFIELD1?>

Invalid fields: <CNIEMA>

Anything else is sent to the printer "as-is".

Concatenate all lines together - this is what is sent to the printer.

Conditional IIF Statements

If the datafield name starts IIF, then it represents a conditional test, which will output 1 of 2 possible values. Syntactical rules here have been updated to incorporate calculated fields - however backward compatibility is maintained for existing templates.

The basic statement structure is:

<IIF~value1~operator~value2~trueoutput~falseoutput>

IIF statements must be encased by <> delimiter pairs. A separator (example shown uses ~) must separate each element in the statement.

Original Format:

<IIF~PRICETAX1~EQ~0.00~TAX FREE~TAX PAID>

Which means if the current value of existing defined field PRICETAX1 is identical to '0.00', then output the text 'TAX FREE' here , else output 'TAX PAID.'

New Format allowing inclusion of data field and calculated field values:

<IIF~PRICETAX1~EQ~0.00~?MyCalcField1?~!PRICETAX1!>

or more correctly using the new delimited syntax:

<IIF~!PRICETAX1!~EQ~'0.00'~'No Tax Charged'~!PRICETAX1!>

The parser assumes any value not surrounded by identifiers such as !, ? or ' will be a data field. If no matching data field is found - the value is assumed to be a literal value.

The separator symbol is recommended as ~, but does not have to be. If you need ~ in the output value, then use a different separator symbol, which must be used consistently in all the places that the ~ was used.

Operators:

The operators available for the IIF statement are:

EQ	Equals i.e. value1~EQ~value2
GT	Greater than
GTE	Greater than equal to
LT	Less than
LTE	Less than equal to

Important: The Vista Print template parser will attempt to convert any IIF statement values into a numeric format - if this is not possible then text comparisons are performed. Text comparisons will only return true if the text is identical.

Special Notes

Recommend in the template to have only ONE data field per line and to put it at the end of the line. Then continue the next set of printer commands and field on the next line.

This mimics the internal processing that is done.

Also recommend put a ; at the end of the datafield, so you can comment what the line is doing.

In general each line should be a set of printer commands, definitions or hard coded text, followed by a data field, calculated value or IIF statement. For instance:

```
{subst definition}akjsh3546<CINEMA>; Cinema name
```

```
{subst definition}akjsh3546<?CalcField1?>; Ticket Cost * Tax rate
```

```
{subst definition}akjsh3546<!CINEMA!>; Cinema Name (new syntax)
```

Special Case:

If the data in the data field is empty (ie "", not a space ' '), then the entire line is discarded, including the printer commands. This can be a handy way of stopping box drawing if the data inside the box is empty. For instance, if the line was {printer commands draw box} <data>, and the data was "", then the box drawing command would be thrown away.

Note: Example template files available on CD under the install area in PrintTemplates folder.

Parallel Printers Suffering Flow Control Problems:

To create delay between tickets add keyword !PRINTPAUSE=nnnn! where nnnn is the number of seconds to delay.

Ticket Printing Data Fields

Filename: Ticket.txt (also Refund tickets)

Filename: RefundTicketsSummarised.txt. Refunded tickets printed on one slip - POS only.

Note: All data values are TRIMMED (leading and trailing spaces removed).

Field Name	Description	Example	POS version	Sales Server version
CINEMA	Name of cinema (as defined in Short Name field)	ABC Cinemas	3.0	3.0
CINEMABRANCHNO	Cinema Branch Number	10	n/a	3.0 sp03
SCREENNO	Screen no of session which ticket is for	3	3.0	3.0
SCREENNAME	Screen Name	Cinema 3	3.0	3.0
FILMTITLEFULL	Film Title in Full	Gone with the Wind	3.0	3.0
FILMTITLESHORT	Film Title Abbreviated (esp. for ticket)	The Wind	3.0	3.0
FILMCODE	Code given to film	CS00000113	3.0	3.0
SESSIONSTARTFULL	Session Start Time, full format	Fri Nov 26, 1999 20:00	3.0	3.0
SESSIONSTARTSHORT	Session Start Time, short format	26 Nov 20:00	3.0	3.0
ADMITDETAILS	Word 'admit' followed by area & seat no, or for Group Tickets, it will be Admit, followed by the quantity of admissions. If you have free seating and it is a normal sale it will say: ADMIT If you have reserved seating for a normal sale it will say: ADMIT F-25 If it is a group sale for 8 tickets, it will say: ADMIT 8	ADMIT	3.0	3.0
CREDITTEXT	Words printed when a ticket is refunded or voided. If ticket is refunded "REFUND", voided "VOID", exchanged "SWAP". For a ticket sold it will be blank.	REFUND	3.0	3.0 - empty
TICKETTYPEDESC	What sort of ticket	Adult	3.0	3.0
TICKETTYPECODE	Internal code for the sort of ticket	ADLT	3.0	3.0
TICKETCOST	Final Price of ticket as paid by customer	\$7.50 (including currency)	3.0	3.0

TICKETCOSTCASH2	As above but in second currency	\$150.00	3.0	3.0
TICKETPAYMENT	Method of payment (always 'Cash' currently)	CSH	3.0	3.0
TRANSACTIONIDENTIFIER	Unique number corresponding to ticket, i.e. Transaction No./Sequence No./Session No.	0003476/002/00567	3.0	3.0
MESSAGE1	Ticket message 1 (derived from a combination of ticket messages from workstation, screen, cinema, and cinema complex)	Welcome to ABC Cinemas in Boston	3.0	3.0
MESSAGE2	Ticket message 2 (derived from a combination of ticket messages from workstation, screen, cinema, and cinema complex)	Welcome to ABC Cinemas in Boston	3.0	3.0
MESSAGESTUB1	Ticket message 1 truncated to fit on ticket stub	Happy New Year	3.0	3.0
MESSAGESTUB2	Ticket message 2 truncated to fit on ticket stub	Happy New Year	3.0	3.0
FILMMESSAGE1	Message 1 for film (see film maintenance)	Film Ends 21/03	3.0	3.0
FILMMESSAGE2	Message 2 for film	Film Ends 21/03	3.0	3.0
FILMMESSAGE3	Message 3 for film	Film Ends 21/03	3.0	3.0
FILMMESSAGE4	Message 4 for film	Film Ends 21/03	3.0	3.0
PACAKAGEDESC	Name of ticket package	Family Pass	3.0	3.0 - empty
PACKAGECOST	Cost of total package. This will be TICKETCOST if not a package.	\$40.00	3.0	3.0 - empty
TEXTTAX	Symbols used to denote customary name for tax.	GST	3.0	3.0
TAXNUMBER	Cinema's registered number for the above tax	13-3765-89	3.0	3.0
TICKETSOURCE	Where ticket was purchased from - fixed values: KIOSK, or E-TICKET(Web,Ivr), or blank if purchased in the cinema at a counter POS.	KIOSK	3.0	3.0
SEATID	Seat Number	25	3.0	3.0
ROWID	Seat Row Number	F	3.0	3.0
AREA	Seating Physical Area	Stalls	3.0	3.0
WORKSTATION	Number of the workstation selling the ticket.	POS008	3.0	3.0
USER	Number of the user selling the ticket.	8207	3.0	3.0 - empty
SHOWNUMBER	Sequential number of the show.	3	3.0	n/a
TICKETNUMBER	Unique Sequential Number assigned to ticket, especially to match pre-printed ticket roll number	883567	3.0	3.0

TICKETNUMBERREFUNDED	Ticket number from the ticket refunded.	883567	3.0	3.0 - empty
TIMEZONE	A code for a time period within which a session fits.	CS0000003	3.0	3.0
CINLOCATIONCODE	Govt code number held in BranchNo field in Cinema table. Acts like a head office complex identifier code.	MET	3.0	n/a
POSLOCATIONCODE	WorkstationLocationCode, taken from BranchNo field in Cinema table. (While it will be a workstation code for kiosks in phase II, all POS in a cinema will have the same code so OK to get it from table cinema).	MET	3.0	n/a
PICKUP	Y for booking pickups, else N.	Y	n/a	3.0
TOTALTIXVALUE	Formatted total value of tickets in order	\$10.00	n/a	3.0 sp04
TOTALTIXVALUEEXCLTAX	Formatted total value of tickets in order, excluding tax	\$9.10	n/a	3.0 sp04
TOTALTIXTAX	Formatted total value of ticket tax in order	\$0.90	n/a	3.0 sp04
BOOKINGNUMBER	For booking pickups - Booking Number	127971	n/a	3.0 sp03
BOOKINGSOURCE	Sales Channel booking created through	WWW	n/a	3.0

The field names below specify separate fields for Cinema address lines (addressline1, addressline2, addressline 3 etc, City & postcode). The ticket layout template itself can be altered for the particular cinema to add commas between address lines where required, to determine whether to concatenate address lines, and to remove those fields which hold blank data.

CINADDR1	Cinema Address, line 1	22 Dundonald St	3.0	3.0
CINADDR2	Cinema Address, line 2	Newton	3.0	3.0
CINADDR3	Cinema Address, line 3	Auckland	3.0	3.0
CINADDR4	Cinema Address, line 4	New Zealand	3.0	3.0
CENSORRATING	Censor Rating of movie (which can be appended on the ticket so it follows straight after the movie name, irrespective of the length of the movie name).	eg PG	3.0	
SESSIONDATE	Session date (date only, without time concatenated) - base on Configuration DateFormat?	eg 27/3/2000	3.0	3.0
SESSIONTIME	Session time (without date) - base on Configuration TimeFormat?	eg 11:20pm	3.0	3.0
SESSIONNUMBER	Unique sequential number assigned to session.	eg 4378954	3.0	
SYSTEMDATE	This is the date the transaction was written.	eg 25/12/2000	3.0	3.0

SYSTEMTIME	This is the time the transaction was written.	eg 11.44am	3.0	3.0
SESSIONDAYOFWEEK	Session day of week - base on Configuration "ShortDayName".	eg Thu	3.0	3.0
SESSIONDAY	Day of week expressed as a number.	1 (ie. Sunday)	3.0	3.0
SESSIONEND	Finish time of session	eg 1.00pm	3.0	3.0
AREACATEGORYCODE	Area Category Code	ADLT	3.0	3.0
AREACATEGORY	Area Category description where seat located	eg STALLS	3.0	3.0

Need tax breakdown for the ticket: (Total Price of Ticket already exists as TICKETCOST)

PRICETAX1	Tax1 amount included in ticket (NOT incl. Currency symbol).	Sales Tax Box Office	3.0	3.0
PRICETAX2	Tax2 amount included in ticket (NOT incl. Currency symbol).	Sales Tax Box Office	3.0	3.0
PRICETAX3	Tax3 amount included in ticket (NOT incl. Currency symbol).	Sales Tax Box Office	3.0	3.0
PRICETAX4	Tax4 amount included in ticket (NOT incl. Currency symbol).	Sales Tax Box Office	3.0	3.0
REDEMPPRICE	Redemption price of ticket.	eg \$7.50	3.0	n/a
PRICEBEFORETAX	Base Price of Ticket, before taxes applied (NOT incl. Currency symbol).	eg \$6.25	3.0	3.0
TRANSACTIONNUMBER	Unique number corresponding to ticket, i.e. Transaction No (do not include leading zeroes).	3476	3.0	3.0
SEQUENCE NUMBER	Sequence number of ticket within transaction.	2	3.0	3.0
USERREGISTRATION	Whether printer uses registration marks	' '=yes, " " = no	3.0	3.0
CUSTTICKETREF	Remote ticket customer reference (booking)	e.g. 12345	3.0	3.0 - empty
USERFIRSTNAME	The First Name of the User	e.g. Igor	3.0	n/a
USERINITIAL	The Initial of the User	e.g. I	3.0	n/a
USERLASTNAME	The Last Name of the User	e.g. Smith	3.0	n/a
USERID	The ID of the User	e.g. 456	3.0	n/a
BOOKINGFEE	Fee Charged for Booking	e.g. \$5	3.0	3.0
SHOWNUMBER	The Show Number	e.g. 44	3.0	n/a
BARCODE	Redemption barcode	e.g. 05000	3.0	3.0 - empty
BOOKINGBARCODE	Barcode formatted for booking collection - entire order	B10 0012345	n/a	3.1

SHORTBOOKINGBARCODE	As above - short form for mobile devices	S100012345	n/a	3.1
BOOKINGTICKETBARCODE	Barcode formatted for booking collection - single ticket, includes ticket sequence number.	B10 00123450001	n/a	3.1
SHORTBOOKINGTICKETBARCODE	As above - short form for mobile devices	S1000123450001	n/a	3.1
TRANSACTIONBARCODE	Barcode formatted for direct to usher point use - entire order	T10 0012345	n/a	3.1
SHORTTRANSACTIONBARCODE	As above - short form for mobile devices	U100012345	n/a	3.1
TRANSACTIONTICKETBARCODE	Barcode formatted for direct to usher point use - single ticket, includes ticket sequence number.	T10 00123450001	n/a	3.1
SHORTTRANSACTIONTICKETBARCODE	As above - short form for mobile devices	U1000123450001	n/a	3.1

Fields in Alternative Language:

Field Name	Description	Example		
ADMITDETAILSALT	Word 'admit' followed by area & seat no, in the alternate language.	ADMIT Stalls F-25	3.0	3.0
AREAALT	Seating Physical Area.	Stalls	3.0	3.0
AREACATEGORYALT	Pricing Area Category where seat Located.	Primo	3.0	3.0
CENSORRATINGALT	Censor Rating of movie in the Alternative Language (which can be appended on the ticket so it follows straight after the movie name, irrespective of the length of the movie name).	e.g. PG	3.0	3.0
CINEMAALT	Alternative Name of cinema (as defined in Alternative Short Name field)	ABC Cinemas	3.0	3.0
CINADDR1ALT	Cinema Address, Line 1.	22 Dundonald St	3.0	3.0
CINADDR2ALT	Cinema Address, Line 2.	Newton	3.0	3.0
CINADDR3ALT	Cinema Address, Line3.	Boston	3.0	3.0
CINADDR4ALT	Cinema Address, Line 4.	Massachusetts	3.0	3.0
FILMTITLEFULLALT	Film title in full	Gone with the Wind	3.0	3.0
FILMTITLESHORTALT	Film title abbreviated	The Wind	3.0	3.0
MESSAGE1ALT	Ticket message 1 (derived from a combination of ticket messages from workstation, screen, cinema, and cinema complex)	Welcome to ABC Cinemas in Boston	3.0	3.0

MESSAGE2ALT	Ticket message 2 (derived from a combination of ticket messages from workstation, screen, cinema, and cinema complex)	Welcome to ABC Cinemas in Boston	3.0	3.0
MESSAGESTUB1ALT	Ticket message 1 truncated to fit on stub.	Happy New Year	3.0	3.0
MESSAGESTUB2ALT	Ticket message 2 truncated to fit on stub.	Happy New Year	3.0	3.0
PACKAGEDESCALT	Package description	Famile	3.0	3.0 - empty
SCREENNAMEALT	Screen Name	Audi 3	3.0	3.0
TICKETTYPECODEALT	Type of ticket	Adultos	3.0	3.0
TICKETTYPEDESCALT	Type of ticket	Adultos	3.0	3.0

All Fields Available for Ticket Printing

The following is a list of field names available for use in ticket printing via the Print Template File.

ADMITDETAILS	PRICEBEFORETAX
ADMITDETAILSALT	PRICETAX1
AREA	PRICETAX2
AREAALT	PRICETAX3
AREACATEGORYCODE	PRICETAX4
AREACATEGORY	REDEMPTIONPRICE
AREACATEGORYALT	ROWID
BARCODE	SEATID
BOOKINGBARCODE	SCREENNAME
BOOKINGNUMBER	SCREENNAMEALT
BOOKINGSOURCE	SCREENNO
BOOKINGTICKETBARCODE	SEQUENCENUMBER
CENSORRATING	SESSIONDATE
CENSORRATINGALT	SESSIONDAY
CINADDR1	SESSIONDAYOFWEEK
CINADDR1ALT	SESSIONEND
CINADDR2	SESSIONNUMBER
CINADDR2ALT	SESSIONSTARTFULL
CINADDR3	SESSIONSTARTSHORT
CINADDR3ALT	SESSIONTIME
CINADDR4	SHORTBOOKINGBARCODE
CINADDR4ALT	SHORTBOOKINGTICKETBARCODE
CINEMA	SHORTTRANSACTIONBARCODE
CINEMAALT	SHORTTRANSACTIONTICKETBARCODE
CINLOCATIONCODE	SYSTEMDATE
CREDITTEXT	SYSTEMTIME

CUSTTICKETREF	TAXNUMBER
FILMCODE	TEXTTAX
FILMMESSAGE1	TICKETSOURCE
FILMMESSAGE2	TICKETTYPECODE
FILMMESSAGE3	TICKETTYPECODEALT
FILMMESSAGE4	TICKETCOST
FILMTITLEFULL	TICKETCOSTCASH2
FILMTITLEFULLALT	TICKETNUMBER
FILMTITLESHORT	TICKETNUMBERREFUNDED
FILMTITLESHORTALT	TICKETPAYMENT
MESSAGE1	TICKETTYPEDESC
MESSAGE1ALT	TICKETTYPEDESCALT
MESSAGE2	TIMEZONE
MESSAGE2ALT	TOTALTIXTAX
MESSAGESTUB1	TOTALTIXVALUE
MESSAGESTUB1ALT	TOTALTIXVALUEEXCLTAX
MESSAGESTUB2	TRANSACTIONBARCODE
MESSAGESTUB2ALT	TRANSACTIONIDENTIFIER
PACKAGEDESC	TRANSACTIONNUMBER
PACKAGEDESCALT	TRANSACTIONTICKETBARCODE
PACKAGECOST	USER
PICKUP	USERREGISTRATION
POSLOCATIONCODE	WORKSTATION

Receipt and Booking Voucher Data Fields

Filename: Receipt.txt, BookingVoucher.txt (remote devices only)

Important: Receipts and Booking Vouchers printed from Remote Devices (via Vista Sales Server) do not populate any of the 'TEXT' fields listed below with text, the fields are output with no content. Data fields should be used instead.

Field Name	Description	Example	POS version	Sales Server version
BALANCETEXT	Text for Balance	Balance	3.0	3.0 sp04 - empty
BALANCETOTAL	Total amount of order	\$40.50	3.0	3.0 sp04
BALANCETOTALCASH2	As above but in second currency	\$881.00	3.0	3.0 sp04 - empty
ROUNDINGTEXT	Text for rounding	Rounding	3.0	3.0 sp04 - empty
ROUNDINGVALUE	Amount rounded	\$0.02	3.0	3.0 sp04 - empty
CASHADVTEXT	Text for Cash Advance	Cash Adv	3.0	3.0 sp04 - empty
CASHADVTOTAL	Amount of cash advance	\$20.00	3.0	3.0 sp04 - empty
CBARTEXT	Text for Candy Bar	Candy Bar	3.0	3.0 sp04 - empty
CBARTOTAL	Amount for candy bar items	\$15.00	3.0	3.0 sp04
TICKETTEXT	Text for Ticket Tickets	Ticket Tickets	3.0	3.0 sp04 - empty
TICKETTOTAL	Total amount of tickets	\$44.00	3.0	3.0 sp04
CHANGETEXT	Text for Change.	Change	3.0	3.0 sp04 - empty
CHANGEVALUE	Amount given as change	\$5.50	3.0	3.0 sp04 - empty
SUBTOTAL	Sum of payments without taxes	\$4.25	3.0	3.0 sp04
CINEMA	Name of cinema (as defined in Short Name field)	ABC Cinema	3.0	3.0 sp04
TEXT	Inclusive Tax text	Invoice GST Inclusive	3.0	3.0 sp04 - empty
TITLE	Receipt Text	RECEIPT	3.0	3.0 sp04 - empty
CINEMAADDRESS1	Address of Cinema	22 Dundonald St	3.0	3.0 sp04
CINEMAADDRESS2	Address of Cinema (line 2)	Newton	3.0	3.0 sp04
CINEMAADDRESS3	Address of Cinema (line 3)	Boston	3.0	3.0 sp04
CINEMAADDRESS4	Address of Cinema (line 4)	New Zealand	3.0	3.0 sp04
CINEMAADDRESSALT1	Address of Cinema in alternate language		3.0	3.0 sp04
CINEMAADDRESSALT2	Address of Cinema in alternate language (line 2)	Bad Canstadt	3.0	3.0 sp04
CINEMAADDRESSALT3	Address of Cinema in alternate language (line 3)	Stuttgart	3.0	3.0 sp04
CINEMAADDRESSALT4	Address of Cinema in alternate language (line 4)	Deutschland	3.0	3.0 sp04
CURRENCYSYMBOL	Symbol of currency	\$	3.0	3.0 sp04
DATE	Today's date (Text & date)	Date: 13:25 27Apr01	3.0	3.0 sp04

GSTTEXT	Text for Sales Tax Registration that says GST	GST	3.0	3.0 sp04 - empty
GSTCODE	Cinema GST code	345-342-645	3.0	3.0 sp04
MEMBERNAME	Name of loyalty customer	Joe Smith	3.0	3.0 sp04
MEMBERSHIPID	Membership number of loyalty customer	546840680	3.0	3.0 sp04
CURRENTPOINTS	Balance of loyalty points held for loyalty customer	5875	3.0	3.0 sp04 - empty
POINTSUSED	Number of Loyalty Points Used in Order	26	3.0	3.0 sp04
MESSAGE1	Receipt text line 1 (cinema table)	Use Cine-Line 915	3.0	3.0 sp04 - empty
MESSAGE2	Receipt text line 2	for booking your tickets	3.0	3.0 sp04 - empty
MESSAGE3	Receipt text line 3	over the phone using	3.0	3.0 sp04 - empty
MESSAGE4	Receipt text line 4	your VISA or Master	3.0	3.0 sp04 - empty
MESSAGE5	Receipt text line 5	Card - Thanks from	3.0	3.0 sp04 - empty
MESSAGE6	Receipt text line 6	Vista	3.0	3.0 sp04 - empty
OPERATOR	Operator (Text & Name)	Opr : 6454 Jane D	3.0	3.0 sp04
PAYMENTTEXT	Form of payment	VISA	3.0	3.0 sp04 - empty
PAYMENTTEXTALT	Form of payment in alternate language	VISA	3.0	3.0 sp04 - empty
PAYMENTVALUE	Payment Value	\$11:00	3.0	3.0 sp04
TOTALEXCLTAXTEXT	Text which says "Total excluding Tax"	Total excluding Tax	3.0	3.0 sp04 - empty
TOTALEXCLUDETAX	Amount of order with Exclusive Tax	\$43.54	3.0	3.0 sp04
TOTALTAX	Amount of Inclusive Tax. This tax amount will be zero, depending on POS settings, or regional settings (i.e. in a country where inclusive tax not used, it will be zero).	\$1.63	3.0	3.0 sp04
TOTALTAXEXCLUDED	Amount of Exclusive Tax. Used if POS settings allow for prices with exclusive tax, or if exclusive tax is used in the country. Otherwise will be zero.	\$0.15	3.0	3.0 sp04
TRANSACTIONNUMBER	Vista application transaction number	eg. 3476	3.0	3.0 sp04
SEQUENCENUMBER			3.0	3.0 sp04
RECEIPTNUMBER	Receipt number (see configuration setting: - Ticket numbering inventory)	eg. 8062	3.0	3.0 sp04
TRANSACTIONIDENTIFIER	Text and Transaction Number	T/N : 293456	3.0	3.0 sp04

WORKSTATIONMSG	Message from workstation form	Have a Good Weekend!	3.0	3.0 sp04 - empty
WORKSTATION	Workstation Name	WGATE001	3.0	3.0 sp04
USERFIRSTNAME	Fist Name of the User	Igor	3.0	3.0 sp04
USERINITIAL	Initial of the User	I	3.0	3.0 sp04 - space
USERLASTNAME	Last Name of the User	Smith	3.0	3.0 sp04 - space
USERID	ID the Operator used to Log onto POS	456	3.0	3.0 sp04
OFFLINEFLAG	Indicates POS was Offline when Receipt was Printed	Y/N	3.0	3.0 sp04 - ('N')
REFUNDTEXT	Text which says "REFUND"	"REFUND3.0	3.0	3.0 sp04 - empty
BOOKINGBARCODE	Barcode formatted for booking collection - entire order	B10 0012345	n/a	3.0 sp04
SHORTBOOKINGBARCODE	As above - short form for mobile devices	S100012345	n/a	3.0 sp04
TRANSACTIONBARCODE	Barcode formatted for direct to usher point use - entire order	T10 0012345	n/a	3.0 sp04
SHORTTRANSACTIONBARCODE	As above - short form for mobile devices	U100012345	n/a	3.0 sp04
BOOKINGNUMBER	For booking pickups - Booking Number	127971	n/a	3.0 sp03
BOOKINGSOURCE	Sales Channel booking created through	WWW	n/a	3.0

The following are generated as one line per item - to print they must be set up as a detail line.

FILMTITLEFULL	Film title in full	American Beauty	3.0	3.0 sp04
FILMTITLEFULLALT	Film title in full alternate language	American Beauty	3.0	3.0 sp04
FILMTITLESHORT	Film title abbreviated	Am.Beauty	3.0	3.0 sp04
FILMTITLESHORTALT	Film title abbreviated in alternative language	Am. Beauty	3.0	3.0 sp04
ITEM	Item Name	Popcorn (or Adult)	3.0	3.0 sp04
ITEMALT	Item name in alternate language	Popcorn	3.0	3.0 sp04
QTY	Quantity of item	3	3.0	3.0 sp04
SESSIONSTARTFULL	Session Start Time, full format	Fri Nov 26,1999 20:00	3.0	3.0 sp04
SESSIONSTARTSHORT	Session Start Time, short format	26 Nov 20:00	3.0	3.0 sp04
SESSIONDATE	Session Date (date only, without time concatenated) based on system setting "DateFormat"	11/02/05	3.0	3.0 sp04
SESSIONTIME	Session Time (without date) - based in system setting "TimeFormat"	11:20pm	3.0	3.0 sp04
SESSIONDAYOFWEEK	Session day of week - based on system setting "ShortDayName"	Thu	3.0	3.0 sp04

SESSIONEND	Finish time of session	12.20pm	3.0	3.0 sp04
SCREENNO	Screen number of session which ticket is for	3	3.0	3.0 sp04
SCREENNAME	Screen name of session which ticket is for	Screen 3	3.0	3.0 sp04
UNITPRICE	Price per individual item	2.50	3.0	3.0 sp04
UNITTAX	Tax per individual item	0.25	3.0	3.0 sp04
NETLINEPRICE	Net value if all items per line	6.75	3.0	3.0 sp04
NETUNITPRICE	Net Value of individual item	2.25	3.0	3.0 sp04
TAX	Tax on all items per line	0.75	3.0	3.0 sp04
ITEMTOTAL	Gross Value of all items per line	7.50	3.0	3.0 sp04
POINTSCOST	Total loyalty points cost of line	7.4	n/a	3.0 sp04
ITEMTEXT	Text for Item	Item	3.0	3.0 sp04 - empty
NETTEXT	Text for Net	Net	3.0	3.0 sp04 - empty
PRICETEXT	Text for Price	Price	3.0	3.0 sp04 - empty
QTYTEXT	Text for Qty	Qty	3.0	3.0 sp04 - empty
TAXTEXT	Text for Tax	Tax	3.0	3.0 sp04 - empty
TOTALPRICETEXT	Text for total price	Price	3.0	3.0 sp04 - empty
TOTALTAXTEXT	Text for total tax	Tax	3.0	3.0 sp04 - empty
TOTALTEXT	Text for total	Total	3.0	3.0 sp04 - empty
UNITTEXT	Text for Unit	Unit	3.0	3.0 sp04 - empty
<DetailPosY>	This is a special internal variable that holds the value of the row position while printing. IT IS ONLY USED IN THE [Detail] SECTION. It cannot be used in the [Header] or [Footer] sections. It holds the row position constant for each line in the [Detail] Section. **		3.0	3.0 sp04

** <DetailPosY> explained

The following template extract prints a line with the Item name, the quantity purchased, and the price:

[Detail]

```
{PosnRC} 390,<DetailPosY>{EC}{Font}9{EC}{FontScaleHW}1,1{EC}<ITEM>;
{PosnRC} 300,<DetailPosY>{EC}{Font}9{EC}{FontScaleHW}1,1{EC}<QTY>;
{PosnRC} 180,<DetailPosY>{EC}{Font}9{EC}{FontScaleHW}1,1{EC}<ITEMTOTAL>;
```

This line is printed for each DIFFERENT TYPE of item purchased (so for 2 Mars bars bought it would print them on the same line with a QTY quantity of 2).

A receipt in which the details section is very long will be printed on two receipts. Both will have the same header and footer (if the footer has a 'total cost' or 'total tax' line, for example, the full amount will be printed on both receipts, with the details section split between the two receipts).

Payment Types and Item Values

Previously in standard receipts, up to four payment types may be printed. These are represented by the PAYTEXT1, PAYVALUE1 fields. These fields are provided for backward compatibility only. In later versions up to 10 payment lines are supported - represented by the PAYMENTTEXT01, PAYMENTTEXTALT01, PAYMENTVALUE01 fields. Each set of fields are returned empty if the transaction does not include the corresponding number of payments i.e. if a transaction includes partial payment by cash, and credit card 01 and 02 will contain data, the remaining 8 sets of fields will be empty.

Field Name	Description	Example	POS version	Sales Server version
PAYTEXT1	Form of payment 1	CASH	3.0	3.0 sp04 - empty
PAYVALUE1	Payment value 1	\$11:00	3.0	3.0 sp04 - empty
PAYTEXT2	Form of payment 2	VISA	3.0	3.0 sp04 - empty
PAYVALUE2	Payment value 2	\$22:00	3.0	3.0 sp04 - empty
PAYTEXT3	Form of payment 3	AMEX	3.0	3.0 sp04 - empty
PAYVALUE3	Payment value 3	\$16:00	3.0	3.0 sp04 - empty
PAYTEXT4	Form of payment 4	CASH	3.0	3.0 sp04 - empty
PAYVALUE4	Payment value 4	\$43.00	3.0	3.0 sp04
PAYMENTTEXT01	Form of Payment 1	CASH	3.0	3.0 sp04
PAYMENTTEXTALT01	Form of Payment in Alternate Language 1	EURO	3.0	3.0 sp04
PAYMENTVALUE01	Payment Value 1	\$18.00	3.0	3.0 sp04
PAYMENTTEXT02	Form of Payment 2	CASH	3.0	3.0 sp04
PAYMENTTEXTALT02	Form of Payment in Alternate Language 2	EURO	3.0	3.0 sp04
PAYMENTVALUE02	Payment Value 2	\$22.00	3.0	3.0 sp04
PAYMENTTEXT03	Form of Payment 3	CASH	3.0	3.0 sp04
PAYMENTTEXTALT03	Form of Payment in Alternate Language 3	EURO	3.0	3.0 sp04
PAYMENTVALUE03	Payment Value 3	\$21.00	3.0	3.0 sp04
PAYMENTTEXT04	Form of Payment 4	CASH	3.0	3.0 sp04
PAYMENTTEXTALT04	Form of Payment in Alternate Language 4	EURO	3.0	3.0 sp04
PAYMENTVALUE04	Payment Value 4	\$4.00	3.0	3.0 sp04
PAYMENTTEXT05	Form of Payment 5	CASH	3.0	3.0 sp04
PAYMENTTEXTALT05	Form of Payment in Alternate Language 5	EURO	3.0	3.0 sp04
PAYMENTVALUE05	Payment Value 5	\$37.00	3.0	3.0 sp04

PAYMENTTEXT06	Form of Payment 6	CASH	3.0	3.0 sp04
PAYMENTTEXTALT06	Form of Payment in Alternate Language 6	EURO	3.0	3.0 sp04
PAYMENTVALUE06	Payment Value 6	\$8.00	3.0	3.0 sp04
PAYMENTTEXT07	Form of Payment 7	CASH	3.0	3.0 sp04
PAYMENTTEXTALT07	Form of Payment in Alternate Language 7	EURO	3.0	3.0 sp04
PAYMENTVALUE07	Payment Value 7	\$19.00	3.0	3.0 sp04
PAYMENTTEXT08	Form of Payment 8	CASH	3.0	3.0 sp04
PAYMENTTEXTALT08	Form of Payment in Alternate Language 8	EURO	3.0	3.0 sp04
PAYMENTVALUE08	Payment Value 8	\$33.00	3.0	3.0 sp04
PAYMENTTEXT09	Form of Payment 9	CASH	3.0	3.0 sp04
PAYMENTTEXTALT09	Form of Payment in Alternate Language 9	EURO	3.0	3.0 sp04
PAYMENTVALUE09	Payment Value 9	\$9.00	3.0	3.0 sp04
PAYMENTTEXT10	Form of Payment 10	CASH	3.0	3.0 sp04
PAYMENTTEXTALT10	Form of Payment in Alternate Language 10	EURO	3.0	3.0 sp04
PAYMENTVALUE10	Payment Value 10	\$16.00	3.0	3.0 sp04

All Fields Available for Receipt and Booking Voucher Printing

The following is a list of field names available for use in Receipt Printing via the Print Template File.

BALANCETEXT	PAYTEXT1
BALANCETOTAL	PAYTEXT2
BALANCETOTALCASH2	PAYTEXT2
BOOKINGBARCODE	PAYTEXT3
BOOKINGNUMBER	PAYTEXT4
BOOKINGSOURCE	PAYVALUE1
BUSINESSPARTNER	PAYVALUE2
CASHADVTEXT	PAYVALUE3
CASHADVTOTAL	PAYVALUE4
CBARTEXT	POINTSCOST
CBARTOTAL	PRICETEXT
CHANGETEXT	QTY
CHANGEVALUE	QTYTEXT
CINEMA	RECEIPTNUMBER
CINEMAADDRESS1	REFUNDTEXT
CINEMAADDRESS2	ROUNDINGTEXT
CINEMAADDRESS3	ROUNDINGVALUE
CINEMAADDRESS4	SCREENNO

CINEMAADDRESSALT1	SCREENNAME
CINEMAADDRESSALT2	SESSIONDATE
CINEMAADDRESSALT3	SESSIONDAYOFWEEK
CINEMAADDRESSALT4	SESSIONEND
CURRENCYSYMBOL	SESSIONSTARTFULL
DATE	SESSIONSTARTSHORT
FILMTITLEFULL	SESSIONTIME
FILMTITLEFULLALT	SEQUENCENUMBER
FILMTITLESHORT	SHORTBOOKINGBARCODE
FILMTITLESHORTALT	SHORTTRANSACTIONBARCODE
GSTTEXT	SUBTOTAL
GSTCODE	TAX
ITEM	TEXT
ITEMALT	TICKETTEXT
ITEMTEXT	TICKETTOTAL
ITEMTOTAL	TOTALEXCLUDETAX
MESSAGE1	TOTALEXCLTAXTEXT
MESSAGE2	TOTALPRICETEXT
MESSAGE3	TOTALTAXEXCLUDED
MESSAGE4	TOTALTAXTEXT
MESSAGE5	TOTALTAX
MESSAGE6	TITLE
NETLINEPRICE	TRANSACTIONBARCODE
NETTEXT	TRANSACTIONIDENTIFIER
NETUNITPRICE	TRANSACTIONNUMBER
OPERATOR	UNITPRICE
PAYMENTTEXT	UNITTAX
PAYMENTTEXTALT	UNITTEXT
PAYMENTVALUE	USERREGISTRATION
	WORKSTATION
	WORKSTATIONMSG

Credit Card Pickup Receipt Printing Data Fields

Filename: PickupCreditCardReceipt.txt

Field Name	Description	Example	POS version
CINEMA	Name of cinema (as defined in Short Name field)	ABC Cinemas	3.0
CINEMAALT	Alternative Name of cinema (as defined in Short Alternative Name field)	ABC Cinemas	3.0
CINEMAADDRESS1	Address of Cinema	IMAX Centre	3.0
CINEMAADDRESS2	Address of Cinema (line 2)	202 Queen St	3.0
CINEMAADDRESS3	Address of Cinema (line 3)	Auckland	3.0
CINEMAADDRESS4	Address of Cinema (line 4)	New Zealand	3.0
CINEMAADDRESSALT1	Address of Cinema in alternate language	123 Schnell Stra 選	3.0
CINEMAADDRESSALT2	Address of Cinema in alternate language (line 2)	Bad Candstadt	3.0
CINEMAADDRESSALT3	Address of Cinema in alternate language (line 3)	Stuttgart	3.0
CINEMAADDRESSALT4	Address of Cinema in alternate language (line 4)	Deutschland	3.0
CARDTYPE	Card Type	AMEX	3.0
CARDNUMBER	Card Account Number	1234 5678 9101 112	3.0
CARDEXPIRY	Card Expiry Date	12/2002	3.0
AMOUNT	Amount of Purchase	\$25.00	3.0
APPROVED	Approved (always '00')	'00'	3.0
AUTHORISATIONCODE	Authorisation Code (always BLANK)		3.0
RECEIPTNUMBER	Bank transaction reference	1432	3.0
TRANSACTIONNUMBER	Vista transaction number	227654	3.0
TRANSACTIONTYPE	Transaction type	'Sale'	3.0
ACCOUNTTYPE	Account Type	'Credit'	3.0
BOOKINGDATETIME	Date and time booking made	10:00 22 Feb 02	3.0
BOOKINGWORKSTATION	Workstation where booking taken	PC574385 or IVR	3.0
BOOKINGWORKSTATIONMSG	Message setup for workstation	Have a good day!	3.0
PICKUPDATETIME	Date and time of pickup	18:00 23 Feb 02	3.0
PICKUPWORKSTATION	Workstation where picked up	PC4385094	3.0
PICKUPWORKSTATIONMSG	Message setup for workstation	Have a good weekend!	3.0
MERCHANTID	Not populated at present	888000002503	3.0
TERMINALID	Obsolete (superseded by Booking Workstation and Pickup Workstation)	Obsolete	3.0

All Fields Available for Credit Card Pickup Receipt Printing

The following is a list of field names available for use in Credit Card Pickup Receipt Printing via the Print Template File.

ACCOUNTTYPE	MERCHANTID
AMOUNT	PICKUPDATETIME
APPROVED	PICKUPWORKSTATION
AUTHORISATIONCODE	PICKUPWORKSTATIONMSG
BOOKINGDATETIME	TERMINALID
BOOKINGWORKSTATION	TRANSACTIONNUMBER
BOOKINGWORKSTATIONMSG	TRANSACTIONTYPE
CARDEXPIRY	RECEIPTNUMBER
CARDNUMBER	USERREGISTRATION
CARDTYPE	
CINEMA	
CINEMAALT	
CINEMAADDRESS1	
CINEMAADDRESS2	
CINEMAADDRESS3	
CINEMAADDRESS4	
CINEMAADDRESSALT1	
CINEMAADDRESSALT2	
CINEMAADDRESSALT3	
CINEMAADDRESSALT4	

Float Receipt Printing Data Fields

Filename: ReceiptPOSFloatAdjust.txt

Note: The first three fields (marked *) occur on a line for each payment type.

Field Name	Description	Example	POS version
ADJUSTMENT*	Text for type of adjustment	Cash Increase	3.0
ADJUSTMENTALT*	Alternate text for adjustment.	Increase	3.0
ADJUSTMENTTEXT*	Text for word Adjustment	'Adjustment'	3.0
ADJUSTMENTVALUE	Absolute value of adjustment	\$40.00	3.0
BALANCETEXT	Enter 'Balance' as Text	'Balance'	3.0
AUTHORISATION	User number and name of the person who authorized drop/increase.	1234 Ted Danson	3.0
AUTHORISATIONTEXT	Enter 'Authorised by' as Text	'Authorised by:'	3.0
CINEMA	Name of cinema (as defined in Short Name field)	ABC Cinemas	3.0
DATE	Date and time adjustment made	09:14 19Feb02	3.0
DATETEXT	Enter 'Date:' as Text	Date:	3.0
OPERATOR	User number and name of operator	1324 Mary Green	3.0
OPERATORTEXT	Enter 'Operator' as Text	'Operator:'	3.0
TITLE	Enter 'POS Float Adjustments' as Text	'POS Float Adjustments'	3.0
TEXTCOPY	Enter 'COPY' as Text	'COPY'	3.0
USERFIRSTNAME	First Name of the User	Igor	3.0
USERINITIAL	Initial of the User	I	3.0
USERLASTNAME	Last Name of the User	Smith	3.0
USERID	ID the Operator used to Log onto POS	3849	3.0
WORKSTATION	Workstation Name	PC12345	3.0
WORKSTATIONTEXT	Enter 'Workstation' as Text	'Workstation'	3.0

All Fields Available for Float Receipt Printing

The following is a list of field names available for use in Float Receipt Printing via the Print Template File.

ADJUSTMENT	OPERATOR
ADJUSTMENTTEXT	OPERATORTEXT
ADJUSTMENTVALUE	TEXTCOPY
AUTHORISATION	TITLE
AUTHORISATIONTEXT	USERREGISTRATION
BALANCETEXT	USERFIRSTNAME
BALANCEVALUE	USERID
CINEMA	USERINITIAL
DATE	USERLASTNAME
DATETEXT	WORKSTATION
	WORKSTATIONTEXT

Voucher Printing Data Fields

Filename: Voucher.txt

Field Name	Description	Example	POS version	Sales Server version
TITLE	Text for Type of Adjustment	Cash Increase	3.0	3.0
CINEMA	Name of cinema (as defined in Short Name field)	ABC Cinemas	3.0	3.0
CINEMABRANCHNO	Cinema Branch Number	10	n/a	3.0 sp03
GSTCODE	GST/Tax Number	111-222-333	3.0	3.0
ITEMTEXT	Enter 'Item' as Text	'Item'	3.0	3.0
QTYTEXT	Enter 'Qty' as Text	'Qty'	3.0	3.0
OPERATOR	POS User Number and Name	1234 Mary Green	3.0	3.0
OPERATORTEXT	Enter 'Operator' as Text	'Operator'	3.0	3.0
DATE	Date Voucher Printed	09:00 02 Feb 2002	3.0	3.0
DATETEXT	Enter 'Date' as Text	'Date'	3.0	3.0
WORKSTATION	Workstation Voucher Printed	WS59874354	3.0	3.0
WORKSTATIONTEXT	Enter 'Workstation' as Text	'Workstation'	3.0	3.0
TRANSACTIONTEXT	Enter 'T/N:' as Text	T/N:	3.0	3.0
TRANSACTIONNUMBER	Transaction Number	0034343	3.0	3.0
ORDERPICKUPAREA	Pickup Area for Order (if items in order are to be picked up from different areas then use ITEMPICKUPAREA)	Counter	3.0	3.0 - empty
PICKUPNUMBER	Order Pickup Number	#34	3.0	3.0 - empty
PICKUP	Y for booking pickups, else N	Y	n/a	3.0
USERFIRSTNAME	The First Name of the User	Igor	3.0	n/a
USERINITIAL	The Initial of the User	I	3.0	n/a
USERLASTNAME	The Last Name of the User	Smith	3.0	n/a
USERID	ID The Operator Used to Log onto POS	456	3.0	n/a
BARCODE	Generated Voucher Barcode	564564789	3.0	n/a
OFFLINEFLAG	Indicates POS was Offline When Voucher was Printed	Y/N	3.0	n/a
TOTALCONCVALUE	Total value of concessions on voucher(s)	\$10.00	n/a	3.0 sp04
TOTALCONCVALUEEXCLTAX	Total value of concessions on voucher(s) - excluding tax	\$9.10	n/a	3.0 sp04
TOTALCONCTAX	Total value of tax for concessions on voucher(s)	\$0.90	n/a	3.0 sp04
BOOKINGNUMBER	For booking pickups - Booking Number	127971	n/a	3.0 sp03

BOOKINGSOURCE	Sales Channel booking created through	WWW	n/a	3.0
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The following item values are generated as one line per item. To print these they must be set up as a detail line.

ITEMPICKUPAREA	Pickup area for item	Counter	3.0	n/a
ITEMPREPAREAREA	Prepare area for item	Kitchen	3.0	n/a
ITEM	Item Name	Ginger Beer	3.0	3.0
ITEMALT	Item Name in Alternative Language	Bier de Ginger	3.0	
ITEMCINOPERATOR	Cinema Operator Item Belongs to	James	3.0	n/a
ORDERPICKUPAREA	Pickup area for order	Main counter	3.0	3.0 - empty
QTY	Quantity of item	2	3.0	3.0
UNITPRICE	Price per individual item	2.50	3.0	3.0
UNITTAX	Tax per individual item	0.38	3.0	3.0
PACKAGECOST	Cost of total package	40.00	3.0	3.0 - empty
PACKAGETAX	Tax on total package	2.10	3.0	3.0 - empty
SALETYPE	Alternative Sale Type for Item	"F" Feature item "O" Optional item	3.0	
USERFIRSTNAME	First Name of the User	Igor	3.0	3.0 sp04
USERINITIAL	The Initial of the User	I	3.0	3.0 sp04
USERLASTNAME	The Last Name of the User	Smith	3.0	3.0 sp04
USERID	ID the Operator uses to Log onto POS	769436	3.0	3.0 sp04
ITEMCOMMENT	Additional Comment about the Item	No Anchovies on Pizza	3.1	
DELIVERYDATETIME	The Time the Order is to be delivered to Customer	16.04 16 Feb 2006	3.1	
BOOKINGBARCODE	Barcode formatted for booking collection - entire order	B10 0012345	n/a	3.1
SHORTBOOKINGBARCODE	As above - short form for mobile devices	S100012345	n/a	3.1
BOOKINGVOUCHERBARCODE	Barcode formatted for booking collection - single voucher, includes concession sequence number.	B10 00123450002	n/a	3.1
SHORTBOOKINGVOUCHERBARCODE	As above - short form for mobile devices	S1000123450002	n/a	3.1
TRANSACTIONBARCODE	Barcode formatted for direct to usher point use - entire order	T10 0012345	n/a	3.1
SHORTTRANSACTIONBARCODE	As above - short form for mobile devices	U100012345	n/a	3.1
TRANSACTIONVOUCHERBARCODE	Barcode formatted for direct to usher point use - single ticket, includes concession sequence number.	T10 00123450002	n/a	3.1
SHORTTRANSACTIONVOUCHERBARCODE	As above - short form for mobile devices	U1000123450002	n/a	3.1

All Fields Available for Voucher Printing

The following is a list of field names available for use in Voucher Printing via the Print Template File.

BOOKINGBARCODE	PICKUP
BOOKINGNUMBER	PICKUPNUMBER
BOOKINGSOURCE	QTY
BOOKINGVOUCHERBARCODE	QTYTEXT
CINEMA	SALETYPE
CINEMABRANCHNO	SHORTBOOKINGBARCODE
DATE	SHORTBOOKINGVOCUHERBARCODE
DATETEXT	SHORTTRANSACTIONBARCODE
DELIVERTDATETIME	SHORTTRANSACTIONVOUCHERBARCODE
GSTCODE	TITLE
ITEM	TRANSACTIONBARCODE
ITEMALT	TRANSACTIONVOUCHERBARCODE
ITEMCOMMENT	TRANSACTIONNUMBER
ITEMPICKUPNUMBER	TRANSACTIONTEXT
ITEMTEXT	USERREGISTRATION
ITEMPREPAREAREA	UNITPRICE
ITEMPICKUPAREA	UNITTAX
ORDERPICKUPAREA	USERFIRSTNAME
ORDERPICKUPNUMBER	USERID
OPERATOR	USERINITIAL
OPERATORTEXT	USERLASTNAME
PACKAGECOST	WORKSTATION
PACKAGETAX	WORKSTATIONTEXT

Prepare Slip Printing Data Fields

Filename: PrepareSlip.txt

Field Name	Description	Example	POS version
CINEMA	Name of cinema (as defined in Short Name field)	ABC Cinemas	
GST CODE	GST/Tax Number	125-887-224	
DATE	Date Prepare Slip Printed	09:00 2nd February 2000	
OPERATOR	POS User Number	1024	
TRANSACTION NUMBER	Transaction Number	034434	
WORKSTATION	Workstation Prepare Slip Printed	WS679694	
PICKUPNUMBER	Order Pickup Number	90372	
PREPAREARESHORTDESC	Short description of the prepare are	Kitchen	
PREPAREAREADESC	Prepare Area description	Ground level kitchen	
DELIVERYWINDOW	Window of time order to be delivered- defined in system setting "Delivery Window"	1st Sitting. ie. 15 minutes after the session has started	
SCREENNUMBER	Screen number of session which order is for	3	
SCREENNAME			
CARDNUMBER	Screen name of session which order is for	Screen 3	
DELIVERYDATETIME	Date and Time order is due to be delivered	20:00 22Jan2000	
DELIVERYPRIORITY	Priority Given to Order	URGENT	3.1
PREPSTARTDATETIME	Time to Start Preparing Order	20:00 22Jan2006	3.1
SESSIONDATETIME	Date and Time session is starting	20:30 22Jan2000	
ROWSEATNUMBER	Row and Seat Number Order to be delivered to	K-9	
COMMENTS	Comment	Customer sitting at Bar	
USERFIRSTNAME	The First Name of the User	Igor	
USERINITIAL	The Initial of the User	I	
USERLASTNAME	The Last Name of the User	Smith	
USERID	The ID of the User	456	
CHANGEDFLAG	Indicates Order has been Changed.	Y/N	
COPYNUMBER	Printer copy. This may be used to determine which copy is being printed. You may wish to print "Customer Copy" if Copy Number is 2	2	

The following item values are generated as one line per item. To print, these must be set up as a detail line.

ITEM	Item Description	Cheese Muffin
ITEMALT	Item Description in alternate language	Kase Brotchen
SALETYPE	Sale Type to Indicate if a Feature or Option	F/O
QTY	Quantity of Item	2

All Fields Available for Prepare Slip Printing

CINEMA	ROWSEATNUMBER
COMMENTS	SCREENNUMBER
COPYNUMBER	SCREENNAME
DATE	TRANSACTIONNUMBER
DELIVERYDATETIME	WORKSTATION
DELIVERYPRIORITY	
DELIVERYWINDOW	
GSTCODE	
ITEM	
ITEMALT	
ITEMCOMMENT	
OPERATOR	
PICKUPNUMBER	
PREPAREAREASHORTDESC	
PREPAREAREADISC	
PREPSTARTDATETIME	
QTY	

Pickup Slip Printing Data Fields

Filename: PickupSlip.txt

Field Name	Description	Example	POS version
CINEMA	Name of cinema (as defined in Short Name field)	ABC Cinemas	
GST CODE	GST/Tax Number	125-887-224	
DATE	Date Prepare Slip Printed	09:00 2nd February 2000	
OPERATOR	POS User Number	1024	
TRANSACTION NUMBER	Transaction Number	034434	
WORKSTATION	Workstation Prepare Slip Printed	WS679694	
PICKUPNUMBER	Order Pickup Number	90372	
PICKUPARESHORTDESC	Short description of the prepare area	Kitchen	
PICKUPAREADESC	Prepare Area description	Ground level kitchen	
DELIVERYWINDOW	Window of time order to be delivered- defined in system setting "Delivery Window"	1st Sitting. ie. 15 minutes after the session has started	
SCREENNUMBER	Screen number of session which order is for	3	
SCREENNAME			
CARDNUMBER	Screen name of session which order is for	Screen 3	
DELIVERYDATETIME	Date and Time order is due to be delivered	20:00 22Jan2000	
DELIVERYPRIORITY	Priority given to order	URGENT	3.1
SESSIONDATETIME	Date and Time session is starting	20:30 22Jan2000	
ROWSEATNUMBER	Row and Seat Number Order to be delivered to	K-9	
COMMENTS	Comment	Customer sitting at Bar	
USERFIRSTNAME	The First Name of the User	Igor	
USERINITIAL	The Initial of the User	I	

USERLASTNAME	The Last Name of the User	Smith	
USERID	The ID of the User	456	
CHANGEDFLAG	Indicates Order has been Changed.	Y/N	
COPYNUMBER	Printer copy. This may be used to determine which copy is being printed. You may wish to print "Customer Copy" if Copy Number is 2	2	

The following item values are generated as one line per item. To print, these must be set up as a detail line.

ITEM	Item Description	Cheese Muffin
ITEMALT	Item Description in alternate language	Kase Brotchen
ITEMCOMMENT	Comment about an item	No anchovies
SALETYPE	Sale Type to Indicate if a Feature or Option	F/O
QTY	Quantity of Item	2

All Fields Available for Prepare Slip Printing

CINEMA	ROWSEATNUMBER
COMMENTS	SCREENNUMBER
COPYNUMBER	SCREENNAME
DATE	TRANSACTIONNUMBER
DELIVERYDATETIME	WORKSTATION
DELIVERYPRIORITY	
GST CODE	
ITEM	
ITEMALT	
ITEMCOMMENT	
OPERATOR	
PICKUPNUMBER	
PICKUPAREASHORTDESC	
PICKUPAREADESC	
QTY	

Tab Slip Data Fields

Filename: TabSlip.txt

Field Name	Description	Example	POS version	Sales Server version
CINEMA	Name of cinema (as defined in Short Name field)	ABC Cinema	3.1	
CINEMAADDRESS1	Address of Cinema	22 Dundonald St	3.1	
CINEMAADDRESS2	Address of Cinema (line 2)	Newton	3.1	
CINEMAADDRESS3	Address of Cinema (line 3)	Boston	3.1	
CINEMAADDRESS4	Address of Cinema (line 4)	New Zealand	3.1	
CINEMAADDRESSALT1	Address of Cinema in alternate language	123 Schnell Strasse	3.1	
CINEMAADDRESSALT2	Address of Cinema in alternate language (line 2)	Bad Canstadt	3.1	
CINEMAADDRESSALT3	Address of Cinema in alternate language (line 3)	Stuttgart	3.1	
CINEMAADDRESSALT4	Address of Cinema in alternate language (line 4)	Deutschland	3.1	
CURRENCYSYMBOL	Symbol of currency	\$	3.1	
DATE	Today's date (Text & date)	Date: 13:25 27Apr01	3.1	
GSTTEXT	Text for Sales Tax Registration that says GST	GST	3.1	
GSTCODE	Cinema GST code	345-342-645	3.1	
TABCODE	Unique serial identifier given to Tab	4853504	3.1	
TABNAME	Name of Tab	Table 9	3.1	
SUBTOTAL	Sum of payments without taxes	\$4.25	3.1	
TOTALEXCLTAXTEXT	Text which says "Total excluding Tax"	Total excluding Tax	3.1	
TOTALEXCLUDETAX	Amount of order with Exclusive Tax	\$43.54	3.1	

TOTALTAX	Amount of Inclusive Tax. This tax amount will be zero, depending on POS settings, or regional settings (i.e. in a country where inclusive tax not used, it will be zero).	\$1.63	3.1	
TOTALTAXEXCLUDED	Amount of Exclusive Tax. Used if POS settings allow for prices with exclusive tax, or if exclusive tax is used in the country. Otherwise will be zero.	\$0.15	3.1	
TOTALPAID	Amount paid off Tab so far	\$50.00	3.1	
BALANCETOTAL	Amount outstanding for tab	\$120.00	3.1	
OPERATOR	POS user	7034 Joe Smith	3.1	
WORKSTATION	Workstation Name	WGATE001	3.1	
USERFIRSTNAME	First Name of the User	Igor	3.1	
USERINITIAL	Initial of the User	I	3.1	
USERLASTNAME	Last Name of the User	Smith	3.1	
USERID	ID the Operator used to Log onto POS	456	3.1	
SYSTEMDATE	Date at time of printing	12 Jan 2006	3.1	
SYSTEMTIME	Time at time of printing	03:00pm	3.1	

The following are generated as one line per item - to print they must be set up as a detail line.

ITEM	Item Name	Popcorn (or Adult)	3.1	
ITEMALT	Item name in alternate language	Popcorn	3.1	
QTY	Quantity of item	3	3.1	
ITEMTOTAL	Total value of item line	\$16.20	3.1	
TAX	Tax on all items per line	0.75	3.1	
ITEMTRANSNUMBER	Vista application transaction number For each item	843548	3.1	

All Fields Available for Tab Slip Printing

BALANCETOTAL	OPERATOR
CINEMA	QTY
CINEMAADDRESS1	SUBTOTAL
CINEMAADDRESS2	SYSTEMDATE
CINEMAADDRESS3	SYSTEMTIME
CINEMAADDRESS4	TAX
CINEMAADDRESSALT1	TABCODE
CINEMAADDRESSALT2	TABNAME
CINEMAADDRESSALT3	TOTALEXCLUDETAX
CINEMAADDRESSALT4	TOTALPAID
CURRENCYSYMBOL	TOTALTAX
DATE	TOTALTAXEXCLUDED
GSTCODE	USERFIRSTNAME
GSTTEXT	USERID
ITEM	USERINITIAL
ITEMALT	USERLASTNAME
ITEMTOTAL	WORKSTATION
ITEMTRANSNUMBER	

Deposit Slip Printing Data Fields

Deposit slips can be printed from CashDesk onto receipt type printers. Typically one copy would be put into a deposit bag and a second copy kept for reference. If no receipt type printer is attached to CashDesk, then a standard deposit slip can be printed to a laser printer.

The deposit print slip is generated by merging the print template formatting information from 3 separate files (Deposit1.txt, Deposit2.txt and Deposit3.txt).

The templates share field names - but within each the fields are populated from different summaries of the deposit data. A list of 'header' fields common to all 3 templates is shown below:

Header Fields (available in all deposit templates):

Field Name	Data Description	Example
Cinema_strName	Name of cinema (as defined in Short Name field)	ABC Cinemas
Deposit_intId	Deposit Number	1234
Fund_strName	Bank Bag Number/Name	4321
User_intUserId	Created by User ID	9123
User_strName	Created by User Name	Sample User
User_intUserIdWitnessed	Witnessed by User ID	9124
User_strNameWitnessed	Witnessed by User Name	Sample User
Deposit_strCreatedDate	Date Created (formatted according to system settings)	25 Feb 2005

Fields in Deposit1.txt:

Data in the Deposit1 template contains data summarised by Payment Type, each [DETAIL] section item contains the payment type description and deposit totals.

Field Name	Data Description	Example
PayType_strDescription	Payment Type Description	Cash
Deposit_intQty	Qty	1
Deposit_curValue	Value	\$100.00
Deposit_strShowQty	Y/N - Is this Payment Type denominated?	N

Fields in Deposit3.txt:

Originally only Deposit1, and Deposit2 (see below), were processed in the deposit print slip. Deposit3 has now also been added and lists cheques (or 'detail' template types) if they exist in the deposit. Deposit 3 is actually processed after Deposit1 and BEFORE Deposit2.

Field Name	Data Description	Example
PayType_strDescription	Cheque name and number	100123
Deposit_curValue	Cheque value	\$5.00

Fields in Deposit2.txt [DETAIL]

Deposit2 is the final processing template. In the [DETAIL] section Deposit2 includes deposit data grouped by each POS Session User from which funds were 'pulled' (standard deposits), or by each misc. transaction type (for misc. revenue deposits). In the [FOOTER] section Deposit2 includes the final totals for the entire deposit.

Field Name	Data Description	Example
PayType_strDescription	POS Session User Name/Transaction Type Name	Cash
Deposit_curTemplateTotal	Total Template items for user/transaction type	\$100.00
Deposit_curMiscTotal	Total Misc. items for user/transaction type	3
Deposit_curDetailTotal	Total Details items for user/transaction type	0
Deposit_curTotalTotal	Total for user/transaction type	3

Fields in Deposit2.txt [FOOTER]

Deposit2 includes the final footer summary data - totals for the entire deposit.

Field Name	Data Description	Example
TemplateTotalTotal	Total template entries	3
MiscTotalTotal	Total miscellaneous entries	0
DetailTotalTotal	Total detail/cheque entries	1
TotalTotal	Total for template	4

All Fields Available for Deposit Slip Printing

Header Fields (available in all deposit templates):

Field Name
Cinema_strName
Deposit_intId
Fund_strName
User_intUserId
User_strName
User_intUserIdWitnessed
User_strNameWitnessed
Deposit_strCreatedDate

Fields in Deposit1.txt:

Field Name

Cinema_strName

Deposit_curValue
Deposit_intId
Deposit_intQty
Deposit_strCreatedDate
Deposit_strShowQty
Fund_strName
PayType_strDescription
User_intUserId
User_intUserIdWitnessed
User_strName
User_strNameWitnessed

Fields in Deposit2.txt:

Cinema_strName
Deposit_curDetailTotal
Deposit_curMiscTotal
Deposit_curTemplateTotal
Deposit_curTotalTotal
Deposit_intId
Deposit_strCreatedDate
DetailTotalTotal
Fund_strName
MiscTotalTotal
PayType_strDescription
TemplateTotalTotal
TotalTotal
User_intUserId
User_intUserIdWitnessed
User_strName
User_strNameWitnessed

Fields in Deposit3.txt

Cinema_strName
Deposit_curValue
Deposit_intId
Deposit_strCreatedDate
Fund_strName
PayType_strDescription
User_intUserId
User_intUserIdWitnessed
User_strName
User_strNameWitnessed

CHAPTER 7

Point of Sale Payment Button .dll

This topic describes the Payment Button DLL to run. Currently the associated POS Payment button DLL is called in four places:

- 1 When a payment button is pressed.
- 2 When a voucher is scanned or manually entered.
- 3 On completion when Voucher transactions are written.
- 4 On completion when transactions are written.

The methods are called with a collection which holds input parameters and into which output parameters can optionally be added. Each parameter is identified by a key.

Button Press:

Method is	SHOWFORM	Input and Output Parameters
	Key	Parameter
Input parameters	HeightFactor	system
	WidthFactor	system
	LangName	system
	BaseLangName	system
	Langfile	system
	LangDefault	system
	BaseLangDefault	system
	AppPath	system
	Amount	Button Amount
Output Parameters	Errors	Error message
	DebtorCode	Debtor Code
	Amount	Amount to pay

Processing Vouchers:

Method is	PROCESS	Input and Output Parameters
	Key	Parameter
Input parameters	Barcode	Barcode number
Output Parameters	DateRedeemed	Used for validation
	VoucherAmount	Value of Voucher

Note: If the voucher has already been redeemed and no further processing for this voucher is not to be used then call method REMOVELAST and this removes the barcode from the output parameters collection.

Voucher Transactions (one call for each voucher):

Method is	PAYCOMPLETE	parameters collection
	Key	Parameter
Output Parameters	(no key)	A delimited string formatted as barcode Voucher Value SQLstr

Note: The SQLstr will be executed as part of completion transaction processing.

Writing Transactions (for each button that has an associated dll):

Method is	PAYCOMPLETE	parameters collection
	Key	Parameter
Output Parameters	SQL	SQL string to be executed

CHAPTER 8

Sending Admissions Data to Rentrak

The company Rentrak collects data from many cinemas around the world on the latest admissions data for each film.

Vista is able to feed a XML file to the Rentrak FTP site. Vista can send two types of files:

- Interim file with Admissions data sent eg every hour
- Final file with Admission data send when the business day has been closed

Firewalls

Configure your firewall so files can be posted to the FTP site.

Error Logging

If an error occurs, this will be written to the log file in D:\Vista\Log folder

CHAPTER 9

Properties of the Rentrak Service

Rentrak Properties

Here is a list of the properties of the Rentrak service.

Property	Type	Description	Example
FilePath	String	Destination path for the export file. If not specified, this will default to the location where the Rentrak Export program resides on the fileserver ie D:\Vista\VistaUtilities	D:\Vista\ExportFiles\Rentrak
ExportOption	String	A code determining which export option is run, from the following: BOH: Box Office Hourly BOF: Box Office Final It is possible to specify more than one option to run by separating the codes with a semi-colon	BOH or BOF;BOH
CinemaOperator	String	Cinema code. This is optional, and will not be used in production if the Export Option is set to either of these: BOH: Box Office Hourly BOF: Box Office Final	0001
BusinessDate	Date	The business date to use for the export option. This is ignored if the Export Option is set to: BOH: Box Office Hourly	31/12/2005

Method	Type	Description
FileExport	Boolean	Creates the specified export file(s). Returns true on success.

Rentrak Configuration File Settings

Here is a list of the configuration settings of the Rentrak service.

There is a sample configuration file on the fileserver in D:\Vista\Config called Sample_ExportRentrak.ini

To use, rename this to ExportRentrak.ini

You must change this configuration file as it has the FTP details.

Section	Setting	Description
FTP	URL	Specifies the destination URL of the FTP transfer. If this setting is blank, the FTP transfer is not executed
FTP	UserName	Specifies the FTP user name
FTP	Password	Specifies the FTP password
FTP	Timeout	Specifies the timeout period, in seconds, of the FTP transfer. Default value is 60 seconds
FTP	SubDirectory	The subdirectory to put files into

eg sample configuration file

[FTP]

URL=ftp://ftp.boxoffice.rentrak.com/IN/

UserName=abc

Password=abc1234

Timeout=60

;leave blank if uploading to root

SubDirectory=IN

CHAPTER 10

Interium File

An SQL Job is created in SQL Jobs called Rentrak Extract.

Set the schedule so the job runs hourly ie

Edit Recurring Job Schedule - AKLVIS01

Job name: Rentrak Export

Occurs

☒ Daily

☐ Weekly

☐ Monthly

Daily

Every 1 day(s)

Daily frequency

☐ Occurs once at: 12:00:00 a.m.

☒ Occurs every: 60 Minute(s) Starting at: 12:00:00 a.m. Ending at: 11:59:59 p.m.

Duration

Start date: 12/08/2003

☐ End date: 21/06/2005

☒ No end date

OK Cancel Help

Change the properties of the SQL Job as describe by the Rentrak Properties list. Each property can be defined as a Const value. Make sure the job is enabled.

Example:

```
Sub Main()
```

```
Const CINEMA_OPERATOR = ""
```

```
Const BUSINESSDATE = ""
```

```
Const FILE_PATH = "D:\Vista\ExportFiles\Rentrak"
```

```
Const EXPORT_OPTION = "BOH"
```

```
Set objRentrakExport = CreateObject("ExportRentrak.CExport")
```

```
    With objRentrakExport
```

```
        .FilePath = FILE_PATH
```

```
        .ExportOption = EXPORT_OPTION
```

```
        If Not .FileExport Then
```

```
            Err.Raise 37000, .LastErrorMsg, "RentrakExport"
```

```
        End If
```

```
    End With
```

```
    Set objRentrakExport = Nothing
```

```
End Sub
```

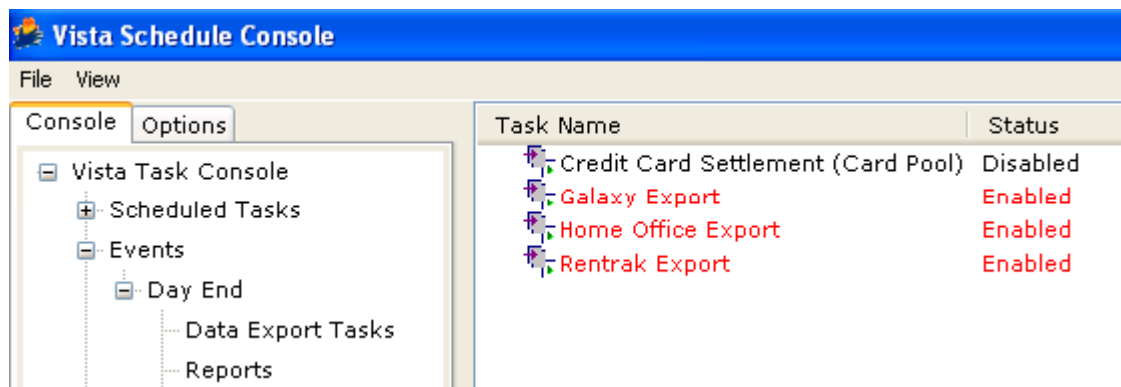

CHAPTER 11

End of Day File

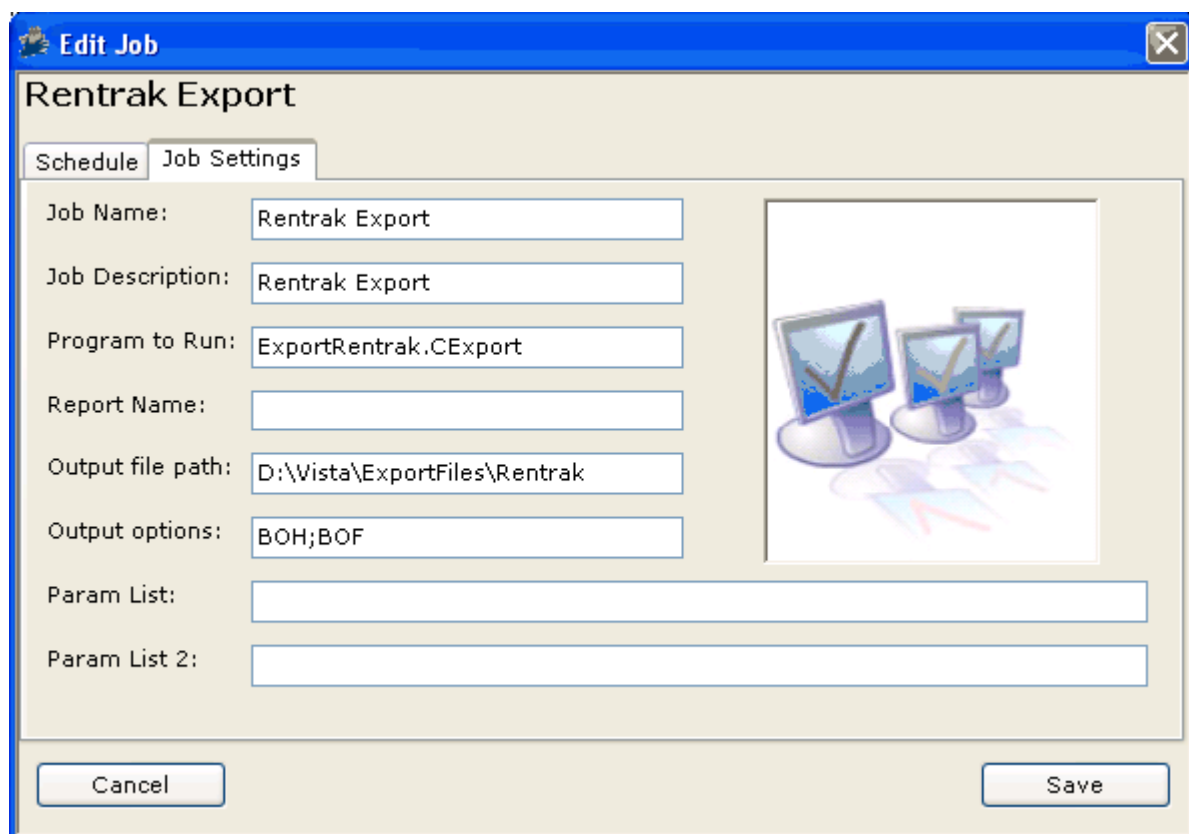
Rentrak can post to the Rentrak FTP site a final file when the close of day process is run. Configure the Rentrak Export process using the Vista Job Scheduler.

Under Events, drill down to Day End and then select Data Export Tasks.

Highlight the Rentrak Export process and select Edit Job Details.



Here is an example of the screen you will be presented with with an example of a typical configuration.



Make sure the task is enabled.

Sending Admissions Data to EDI/Rentrack

Setting Up EDI Feeds (also used by Rentrack)

The EDI Feed created by this extract can also be used by Rentrack in USA.

The sample configuration file is called Sample_ExportEDI.ini and resides on the Cinema Server under:
D:\Vista\Config\

There needs to be a configuration file for EDI and Rentrack:

Eg

ExportEDI.ini

ExportRentrack.ini

For each job, to define which Configuration file to use, go to the Job Scheduler, highlight each task and right mouse click and choose Edit Job Details and choose the Job Settings tab.

Against Output Options field will be the task type eg "WEEK" for Weekly.

Add the INI file name after this. Do not include the .INI on the end eg:

WEEK;ExportRentrack

Setting options:

Setting	Description
ArchiveFolder=C:\EDI\Archive	This specifies where the Archive folder is located after the process in run the files will be moved to here

Setting	Description
TheatreIdField= CinemastrReportData1	Which field in Cinema Complex maintenance to get the Theatre Id from. There options are: Cinema_strBranchNo - Branch Id CinemastrReportData1 - Report Code 1 CinemastrReportData2 - Report code 2
FileFormat=LONG	File format is either LONG or SHORT.
ExportType=EDI	Export format: EDI - You can also use the EDI format when sending to Rentrack USA Rentrack – Rentrack format
URL=ftp.boxoffice.renrak.com	FTP site to post to User id for FTP site
UserName=CinemaUsername	
Password=CinemaPassword	Password for FTP site
Timeout=60	Timeout
SubDirectory=IN	Leave blank if uploading to root folder

The jobs need to be made active to run.

There are 4:

These are time dependent:

- Export EDI Booking
- Export EDI Hourly
- Export EDI Weekly

This is event driven, under the end of day event:

- Export EDI Daily

Head Office Import/Export Metrics for Version 3.1

This guide is designed to help in the setup of a Head Office Import/Export system, especially for circuits with many cinemas.

It includes our test statistics for importing and exporting, and covers the following topics:

- file sizes
- batch upload times
- numbers of transactions for ticket sales and concession sales
- complete uploads vs. incremental uploads
- cube processing for analysis services (full cube processing vs. incremental processing)
- calculations and recommendations for upload times vs. number of cinemas

The amount of time taken for an upload is related to the number of rows from the database that have to be processed. The number of rows in the database that have to be processed is related to the number of transactions that have taken place - namely the number of tickets sold and the number of concessions sold.

Test Upload Statistics - Full Day Upload (Busy Day)

The following data is for a large cinema, on a busy day.

No. of Admits: 16,000

Transactions:

Fund Transactions: 1449 rows

Payment Transactions: 10,183 rows

Concession Transactions: 68,579 rows

Ticket Transactions: 30,055 rows

Total: 110, 332 rows

Head Office Server Specs: Windows 2003, 3.20GHz Processor, 1Gb RAM

Upload Batch File Size: Approx. 10Mb (zipped)

Performance (minutes):

Export from Cinema	Import to Head Office
0:04:30	0:20:34
0:05:40	0:21:45
0:05:23	0:20:57

Test Upload Statistics - Full Day Upload (Average Day)

The following data is for a large cinema, on an average day:

No. of Admits: 5,800

Transactions:

Fund Transactions: 1,101 rows

Payment Transactions: 3,884 rows

Concession Transactions: 24,263 rows

Ticket Transactions: 9,460 rows

Total: 38,769 rows

Head Office Server Specs: Windows 2003, 3.20GHz Processor, 1Gb RAM

Upload Batch File Size: Approx. 2.70Mb (zipped)

Performance (minutes):

Export from Cinema	Import to Head Office
--------------------	-----------------------

0:01:54	0:07:24
---------	---------

0:01:40	0:07:34
---------	---------

0:02:22	0:07:36
---------	---------

Test Upload Statistics - Trickle Feed (Incremental) - Busy Day

The Trickle Feed process allows the user to define how many rows of data are processed during each upload. Thus, the entire day's data is uploaded incrementally during the course of the day. The number of rows to upload per batch is a major consideration, as it is related to the Head Office server speed (how fast can a batch be processed?), the size of the cinema circuit (how many cinemas will be uploading data?), the scheduling of the uploads (when do cinemas export their data - in synchrony, or in a staggered fashion?), and when the batches will be delivered to Head Office (when can the network be used for the upload traffic?).

Trickle Feed Upload: 1000 transactions per table (4000 in total) per batch

File size: 120kB per batch (zipped)

Import for 4000 rows in 44 seconds.

Thus, $(110,000/4,000) \times 44/60 = 20.2$ minutes for whole day's upload.

Usually the Inventory and Ticket tables will contain far more transactions than the Fund and Payment tables.

Thus, the smaller tables will not usually equal the maximum size of the row limit set in the trickle feed.

In this case there are 69,000 concession rows, thus $(69,000/20 \text{ hours}) = \text{approx } 3500$.

So, in this case importing at a rate of 3500 rows per hour will be optimal i.e. minimising CPU usage, and at the same time maintaining a rate of upload that will not exceed the day (i.e. no 'catching up' needed at end of day). However, in reality there will be peaks in activity, so setting up the trickle feed schedule will involve determining how long it will take to import a 1000-transaction batch, how many cinemas there are, and thus how large to set the batch sizes in order to never let the cycle of uploading catch up with itself.

In general, trickle import is averaging 11 seconds per 1000 transactions, $11/1000 = 0.011\text{s/transaction}$. This is for a cinema with 16,000 admits for the day, so a rough guide is $(20.2 \times 60)/16,000 = 0.075\text{s/ticket sold}$ - including an average value of concessions per ticket, and associated fund transactions.

CHAPTER 12

Adding Custom Reports to the Menu

This topic explains how to add you own reports to the report launcher menu. A list of all fields is defined in the Backoffice users guide.

Reports must be written in Crystal Reports version 9. A report may or may not call a stored procedure that does the pre-processing. Almost all Vista's standard reports call a stored procedure to do some pre-processing.

Vista Entertainment allows customers to write their own reports, however they must meet the standards defined in the chapter called Vista Policy on Database Modification within this manual. This is to make sure that any custom written reports do not conflict with the Vista system.

To add a custom report, perform the following steps:

- Add report stored procedure to database

If your report contains a stored procedure, start Query Analyser and execute the stored procedure to load it into memory.

- Add crystal report to each client computer

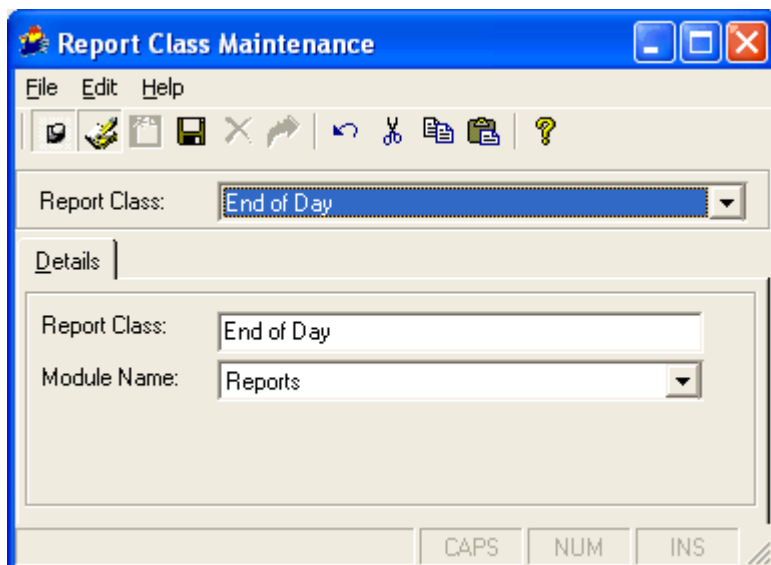
Reports need to reside in \Vista\ReportFiles\ of each Backoffice Client, Headoffice client or Voucher Management client computer.

- Create a new report class (if required)

Go into the Environment Folder, select Report Maintenance, then the Report Classes Cabinet.

Select Create. Type in the name of the new Report Class.

Typically, all report classes will belong to the module called 'Reports'. This inherits the security defined for this module.



- Create the report

It is recommended when defining a new report, that you look at the properties of an existing Vista report to see how it was setup and copy what is similar. This is particularly so for report prompts.

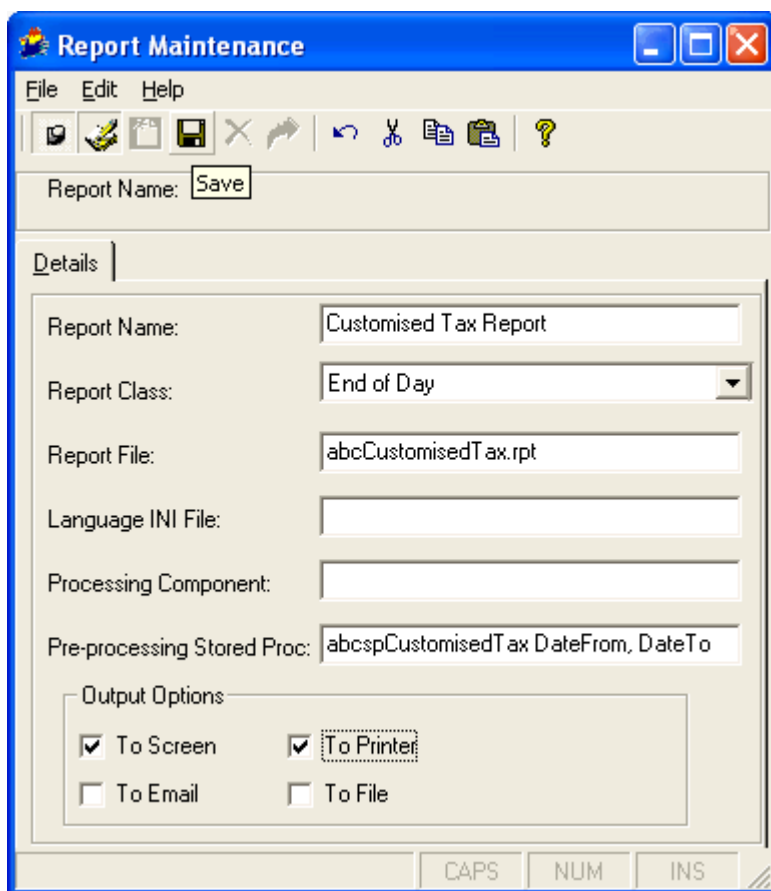
Go into the Environment Folder, select Report Maintenance, select Report Classes Cabinet then Reports Cabinet.

Select Create.

Enter the Report Name, report class and report file name. Enter in details of the pre-processing stored procedure. Normally, only select To Screen and To Printer.

A list of all fields is defined in the Backoffice users guide.

See example below of a new custom report:



The screenshot shows the 'Report Maintenance' dialog box with the 'Details' tab selected. The 'Report Name' field is set to 'Customised Tax Report'. The 'Report Class' dropdown is set to 'End of Day'. The 'Report File' field is set to 'abcCustomisedTax.rpt'. The 'Language INI File' and 'Processing Component' fields are empty. The 'Pre-processing Stored Proc' field is set to 'abcspCustomisedTax DateFrom, DateTo'. The 'Output Options' section has four checkboxes: 'To Screen' (checked), 'To Printer' (checked), 'To Email' (unchecked), and 'To File' (unchecked). At the bottom of the dialog, there are three buttons: 'CAPS', 'NUM', and 'INS'.

- Create the reports prompts

The report prompts can either be prompts that allow you to select a range of information when running the report eg a date range or only show for a particular film. Report prompts are also used to send information like the Cinema name to the Crystal reports.

It is recommended when defining a new report, that you look at the properties of an existing Vista report which has similar prompts, to see how it was setup and copy what is similar.

Go into the Environment Folder, select Report Maintenance, select Report Classes Cabinet then Reports Cabinet. Highlight the new report and select drill down.

Select Create to create a report prompt.

A list of all fields is defined in the Backoffice users guide.

Here is an example of the properties to define when setting up the query for the Cinema Name, which can be a field used within the custom report to print the cinema name on the report.

Report Prompt Maintenance

File Edit Help

Report Formula Name: CinemaName

Details

Report Formula Name: CinemaName

Report Name: Ticket Sales by Film Title

Prompt Type: Query

Filter Field Name:

Sequence: 1 Swap

Prompt Text: Cinema Name

Lookup SQL:

Formula Query: Select Cinema stName from tblCinema

☐ All Upton
 ☒ Ignore Blank
 ☐ Default Date
 ☐ Date Only
 ☐ Separate Time
 ☐ Use Start Time of Day

Frequency:

Data Type: Text

Filter Field: No

Operator: Equal

Formula Field: Yes

Range: No

CAPS N IV INS

Here is an example of the properties to define when setting up the prompt for a date range ie Start and End Date/time.

The screenshot shows the 'Report Prompt Maintenance' window. At the top, the 'Report Formula Name' is set to 'Date'. Below this, the 'Details' tab is active. The 'Report Formula Name' field contains 'Date'. The 'Report Name' field contains 'Ticket Sales by Film Title'. The 'Prompt Type' is set to 'Prompt'. The 'Filter Field Name' is empty. The 'Sequence' is '3' with a 'Swap' button. The 'Prompt Text' is 'Date Range'. The 'Lookup SQL' and 'Formula Query' fields are empty. On the right side, there are several checkboxes: 'All Upton' (unchecked), 'Ignore Blank' (checked), 'Default Date' (checked), 'Date Only' (unchecked), 'Separate Time' (checked), and 'Use Start Time of Day' (checked). Below these are several dropdown menus: 'Frequency' (empty), 'Data Type' (set to 'Date'), 'Filter Field' (set to 'No'), 'Operator' (set to 'And'), 'Formula Field' (set to 'Yes'), and 'Range' (set to 'Yes'). At the bottom right, there are buttons for 'C&PS', 'N IV', and 'INS'.

Report Formula Name:	Date	<input type="checkbox"/> All Upton	<input checked="" type="checkbox"/> Ignore Blank
Report Name:	Ticket Sales by Film Title	<input checked="" type="checkbox"/> Default Date	<input type="checkbox"/> Date Only
Prompt Type:	Prompt	<input checked="" type="checkbox"/> Separate Time	
Filter Field Name:		<input checked="" type="checkbox"/> Use Start Time of Day	
Sequence:	3 <input type="button" value="Swap"/>	Frequency:	
Prompt Text:	Date Range	Data Type:	Date
Lookup SQL:		Filter Field:	No
Formula Query:		Operator:	And
		Formula Field:	Yes
		Range:	Yes

Here is an example of the properties to define when setting up the prompt for a user list box. The All Option needs to be ticked if the operator can choose an all Users option.

Report Prompt Maintenance

File Edit Help

Report Formula Name: User

Details

Report Formula Name: User

Report Name: BO Refund Audit By User

Prompt Type: Prompt

Filter Field Name: tblRptBORefundByDate.User_intUserNo

Sequence: 5 [Swap...](#)

Prompt Text: User Name

Lookup SQL: SELECT User_intUserNo, User_strFirstName + '' + User_strLastName FROM tblUser order by User_strFirstName

Formula Query:

☒ All Option ☒ Ignore Blank

☐ Default Date ☐ Date Only

☐ Seperate Time

☐ Use Start Time Of Day

Frequency:

Data Type: Numeric

Filter Field: Yes

Operator: Equal

Formula Field: Yes

Range: No

CAPS NUM INS

Here is an example of the properties to define when setting up the query for the Start Day of Week, which can be a field used within the custom report so it knows the Start day of the week for reports that require showing sales revenue for each of the 7 days of the week, starting on the start day of the week.

The screenshot shows the 'Report Prompt Maintenance' window. At the top, the 'Report Formula Name' is 'StartDOW'. The 'Details' tab is selected. The configuration is as follows:

Property	Value
Report Formula Name	StartDOW
Report Name	Ticket Sales by Film Title
Prompt Type	Query
Filter Field Name	
Sequence	1
Prompt Text	Start Day of Week
Lookup SQL	
Formula Query	Select Configure_ssrValue from tblConfigure where Configure_ssrName = 'TicketStartDayOfWeek'
All Uppon	<input type="checkbox"/>
Ignore Blank	<input checked="" type="checkbox"/>
Default Date	<input type="checkbox"/>
Date Only	<input type="checkbox"/>
Separate Time	<input type="checkbox"/>
Use Start Time of Day	<input type="checkbox"/>
Frequency	
Data Type	Numeric
Filter Field	No
Operator	Equal
Formula Field	Yes
Range	No

At the bottom right, there are buttons for 'CAPS', 'NUM', and 'INS'.

CHAPTER 13

Log Shipping

Log Shipping is a feature of SQL Server 2000 Enterprise Edition.

This version of SQL Server must be installed on both the Primary Fileserver (PDC) and Backup Server (BDC) .

At regular intervals, eg. every 2 minutes, the transaction log for the VISTA database is copied from the PDC and restored against the BDC VISTA Database. This means that the VISTA database on both servers aligns every few minutes.

If the PDC fails, it is just a case of pointing all client computers, ie. Point of Sale, Backoffice and Kiosks etc, towards the new fileserver.

Setting up Log Shipping

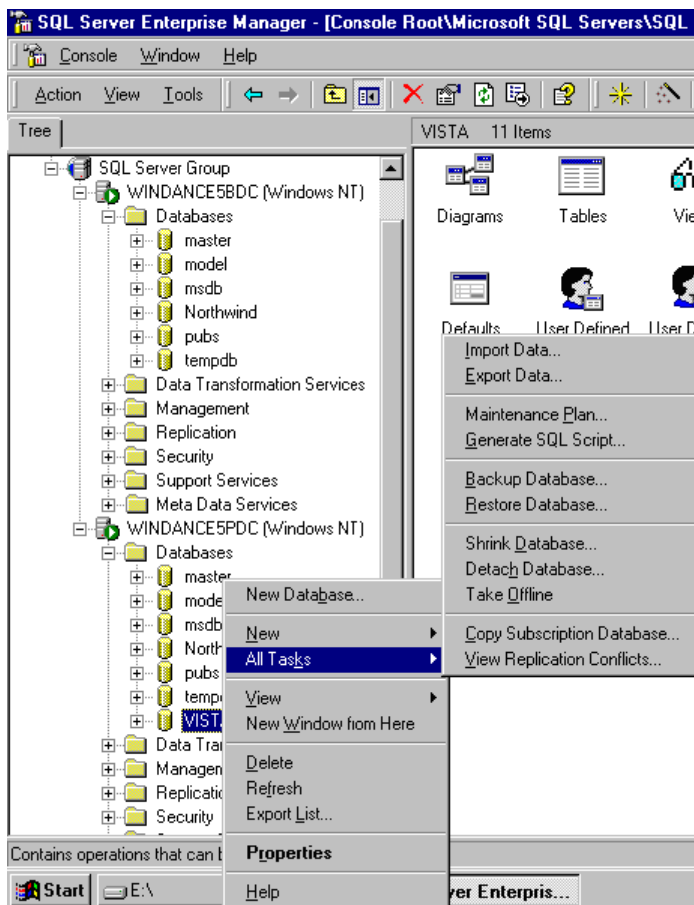
The following instructions assume the PDC is the Primary Cinema Fileserver, the BDC the Backup Cinema Fileserver.

Create a new folder 'Log Shipping' on the PDC, and share this folder with everyone.

Create a new folder 'Log Shipping' on the BDC, and share this folder with everyone.

Open Enterprise manager on the PDC.

- Make sure the PDC and BDC are registered SQL Servers.
- Select the PDC.
- Right click on the VISTA database and select 'All Tasks,' then 'Maintenance Plan.'



- Check the VISTA database under 'These Databases:', Check the box entitled 'Ship the Transaction logs to other SQL Servers' (log shipping). Click Next:

Database Maintenance Plan Wizard - WINDANCE5PDC

Select Databases
Select the databases for which to create the maintenance plan.

☐ All databases
☐ All system databases (master, model, and msdb)
☐ All user databases (all databases other than master, model, and msdb)
☒ These databases:

Database
<input type="checkbox"/> msdb
<input type="checkbox"/> Northwind
<input type="checkbox"/> pubs
<input checked="" type="checkbox"/> VISTA

☒ Ship the transaction logs to other SQL Servers (log shipping)

< Back Next > Cancel Help

Click Next on the 'Update Data Optimization Information' screen:

Database Maintenance Plan Wizard - WINDANCE5PDC

Update Data Optimization Information
As data and index pages fill, updating requires more time. Reorganize your data and index pages to improve performance.

☐ Reorganize data and index pages

- ☐ Reorganize pages with the original amount of free space
- ☒ Change free space per page percentage to: 10

☐ Update statistics used by query optimizer. Sample: 10 % of the database

☐ Remove unused space from database files

- When it grows beyond: 50 MB
- Amount of free space to remain after shrink: 10 % of the data space

Schedule: There are no operations to schedule. Change...

< Back Next > Cancel Help

- Click Next on the 'Database Integrity Check' screen:

The screenshot shows the 'Database Maintenance Plan Wizard - WINDANCE5PDC' window. The title bar is blue with the text 'Database Maintenance Plan Wizard - WINDANCE5PDC' and a close button. The main window has a white header area with the title 'Database Integrity Check' and a subtitle 'Check database integrity to detect inconsistencies caused by hardware or software errors.' To the right of the subtitle is a yellow circular icon with a database cylinder and a checkmark. The main content area is gray and contains the following options: a checkbox for 'Check database integrity' (which is checked), a radio button for 'Include indexes' (selected), a checkbox for 'Attempt to repair any minor problems' (unchecked), a radio button for 'Exclude indexes' (unselected), and a checkbox for 'Perform these checks before doing backups' (unchecked). Below these is a 'Schedule:' section with a text box containing 'There are no operations to schedule.' and a 'Change...' button. At the bottom are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- Change the schedule for the database backup to as often as required:
 - This is a full backup that is run.
 - Recommend 'Daily' at 8am (however up to you, but should be after Vista Business day concludes - after 6am).

The screenshot shows the 'Database Maintenance Plan Wizard - WINDANCE5PDC' window. The title bar is blue with the text 'Database Maintenance Plan Wizard - WINDANCE5PDC' and a close button. The main window has a white header area with the title 'Specify the Database Backup Plan' and a subtitle 'Specify the database backup plan to prevent data loss due to system failure.' To the right of the subtitle is a yellow circular icon with a database cylinder and a checkmark. The main content area is gray and contains the following options: a checked checkbox for 'Back up the database as part of the maintenance plan', a checked checkbox for 'Verify the integrity of the backup when complete', a 'Location to store the backup file:' section with a radio button for 'Tape:' (unselected) and a dropdown menu, and a radio button for 'Disk' (selected). Below these is a 'Schedule:' section with a text box containing 'Occurs every 1 day(s), at 6:00:00.' and a 'Change...' button. At the bottom are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- Change the backup directory to your 'Log Shipping' folder you created earlier. Remove files older than 1 day. Click Next:

Database Maintenance Plan Wizard - WINDANCE5PDC

Specify Backup Disk Directory
Specify the directory in which to store the backup file.

Directory in which to store the backup file:

☐ Use the default backup directory

☒ Use this directory: ...

☐ Create a subdirectory for each database

☒ Remove files older than:

Backup file extension:

< Back Next > Cancel Help

- Change the log backups to the 'Log Shipping' folder created earlier. Remove files older than 1 day. Click Next:

Database Maintenance Plan Wizard - WINDANCE5PDC

Specify Transaction Log Backup Disk Directory
Specify the directory in which to store the transaction log backup file.

Directory in which to store the backup file:

☐ Use the default backup directory

☒ Use this directory: ...

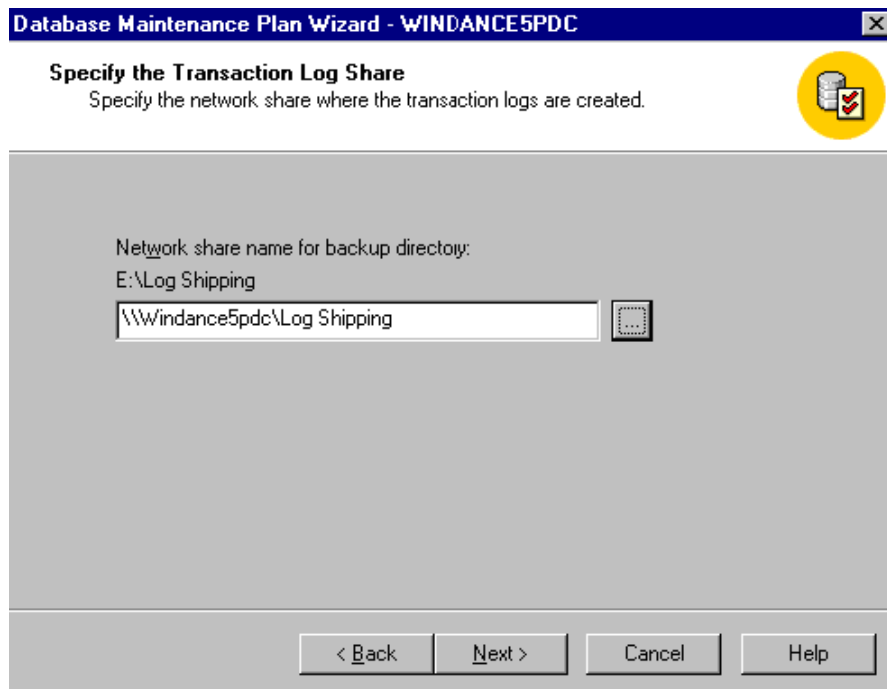
☐ Create a subdirectory for each database

☒ Remove files older than:

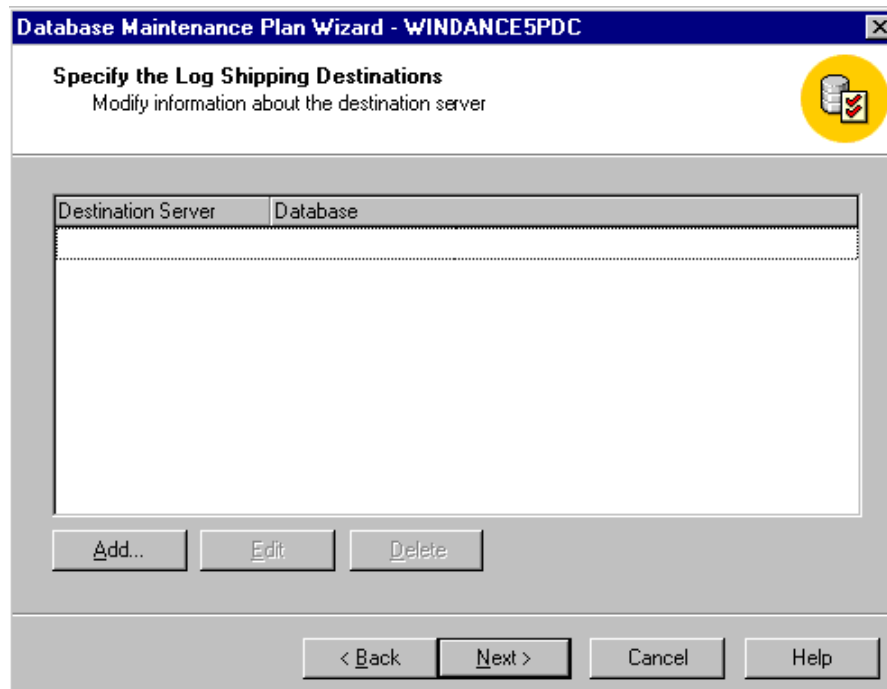
Backup file extension:

< Back Next > Cancel Help

- Browse and select the Log Shipping Network Share on the PDC:

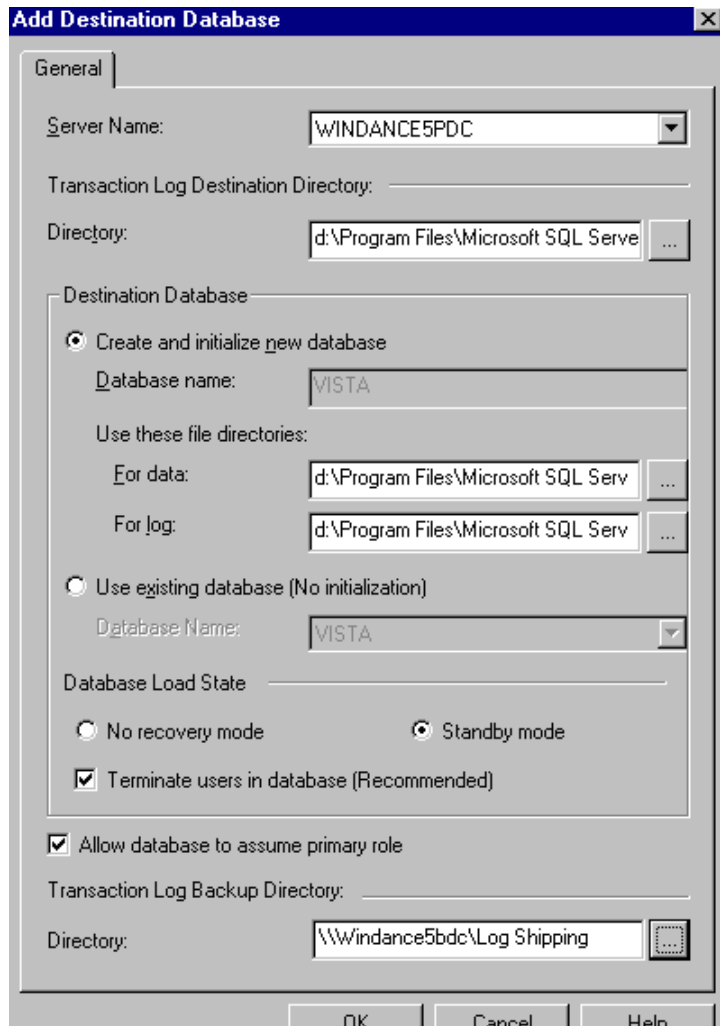


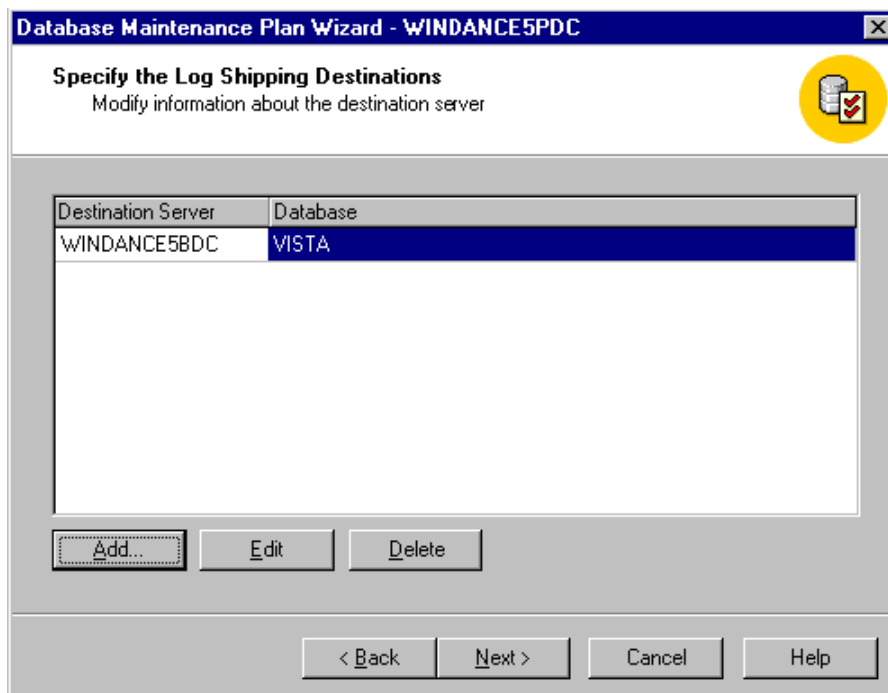
- Click 'Add' to add a new Log Shipping Destination:



- Add Destination Database Screen:
 - Server Name = select the BDC (destination server).
 - Leave the default 'Create and Initialise new database' selected.

- Select 'Standby mode.'
- Check the box 'Terminate users in database.'
- Check the box 'Allow database to assume primary role.'
- Select the Log Shipping network share on the BDC that you created earlier.





- Leave the default 'Perform a full database backup now' selected and click Next:
- Log shipping schedules:
 - Change the backup schedule to be every 5 minutes.
 - Change the Copy/Load Frequency to 10 minutes.
 - Leave the load delay at 0 minutes.

- Leave the file retention period at 24 hours.

The screenshot shows the 'Log Shipping Schedules' step of the 'Database Maintenance Plan Wizard - WINDANCE5PDC'. The title bar is blue with the text 'Database Maintenance Plan Wizard - WINDANCE5PDC' and a close button. The main title is 'Log Shipping Schedules' with a subtitle 'Specify the log shipping schedules at all destinations.' and a yellow icon with a database cylinder and a checkmark. The 'Backup schedule:' is set to 'Occurs every 1 day(s), every 5 minute(s) between 0:00:00 and 23:59:59' with a 'Change...' button. Below this, 'Copy/load frequency:' is set to '10' minutes, 'Load delay:' is set to '0' minutes, and 'File retention period:' is set to '24' hours. At the bottom are buttons for '< Back', 'Next >', 'Cancel', and 'Help'.

- Log Shipping Thresholds:
 - Leave these as default and click Next:

The screenshot shows the 'Log Shipping Thresholds' step of the 'Database Maintenance Plan Wizard - WINDANCE5PDC'. The title bar is blue with the text 'Database Maintenance Plan Wizard - WINDANCE5PDC' and a close button. The main title is 'Log Shipping Thresholds' with a subtitle 'Specify thresholds that, if exceeded, will generate alerts.' and a yellow icon with a database cylinder and a checkmark. The 'Backup alert threshold:' is set to '15' minutes, and the 'Out of sync alert threshold:' is set to '30' minutes. At the bottom are buttons for '< Back', 'Next >', 'Cancel', and 'Help'.

- Log Shipping Monitor Server:
 - Change to 'Use SQL Server Authentication' and leave this blank.

- Click Next:

Database Maintenance Plan Wizard - WINDANCE5PDC

Specify the Log Shipping Monitor Server Information
Specify the central server from which log shipping will be monitored.

SQL Server: WINDANCE5PDC

☐ Use Windows Authentication

☒ Use SQL Server Authentication

Login name: log_shipping_monitor_probe

Password:

< Back Next > Cancel Help

- Click Next on the Reports to Generate screen:

Database Maintenance Plan Wizard - WINDANCE5PDC

Reports to Generate
Specify the directory in which to store the reports generated by the maintenance plan.

☐ Write report to a text file in directory: d:\Program Files\Microsoft SQL S ...

☐ Delete text report files older than: 4 Week(s)

☐ Send e-mail report to operator: ...

New Operator...

< Back Next > Cancel Help

- Click Next on the Maintenance Plan History Screen:

Database Maintenance Plan Wizard - WINDANCE5PDC

Maintenance Plan History
Specify how you want to store the maintenance plan records.

Local server

☒ Write history to the msdb.dbo.sysdbmaintplan_history table on this server

☒ Limit rows in the table to: 1000 rows for this plan

Remote server

History is added to the msdb.dbo.sysdbmaintplan_history table on the remote server.
Windows Authentication is used to log on to the remote server.

☐ Write history to the server:

☒ Limit rows in the table to: 10000 rows for this plan

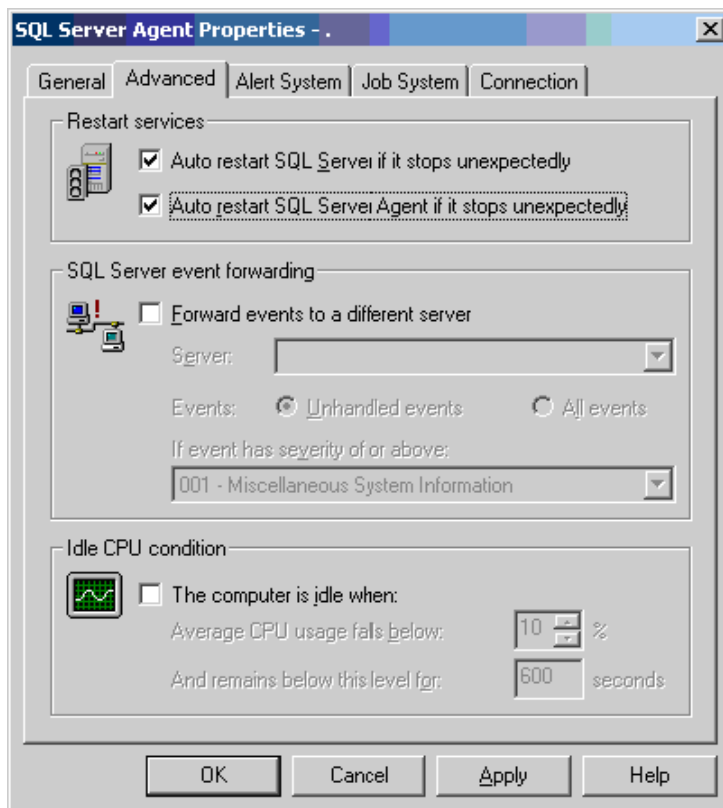
< Back Next > Cancel Help

- Rename the plan to 'Log Shipping' and click Next.
- Click Finish to start the Log Shipping Plan.

Finally, ensure that the SQL Server Agent service is running on both the PDC and BDC and set to start automatically on boot.

- Set SQL Server Agent to auto-restart if stops running:
 - In Enterprise manager right click on SQL Server Agent and select Properties.
 - Go to the Advanced Tab.
 - Check the 'Auto restart SQL Server Agent if it stops unexpectedly' box.

- Click OK.



Redirecting Client Computers to Backup Server

Pointing a Client Computer to a Different Server:

Each client computer i.e. POS, Backoffice and Kiosk, need to be pointed at the new fileserver, this can be done one of two different ways:

Either:

- On each client computer, run the SetupClient option (the icon will be on the desktop of each computer, or in the Vista folder) and set the server name and database name details.

Or

- Map a driver to each client computer and modify the file \Vista\Control\LocalControl.ini for the 2 settings detailed below. Change the fileserver name to be the new fileserver name, eg Server01, indicated in italics.

APPUPGRADESOURCEFOLDER=\\Server01\VISTAINSTALL\APPLIB\

DBCONTROLFOLDER_VISTA=\\Server01\Vista\ConfigDB\VISTA

- Restart each Point of Sale and Kiosk client computer and restart each Vista application on the fileserver and Backoffice computers.

CHAPTER 14

Renaming Fileserver name

You should not rename a fileserver that has SQL Server already installed. The following notes are from the web site:

<http://www.sqlservercentral.com/columnists/bknight/renameserver.asp>

Vista does not recommend changing the computer name when SQL Server has been installed.

Renaming a server can be a tough assignment in SQL Server. The symptoms that SQL Server displays after you rename a server makes it look like you have made an error. There are registry entries and system table records littered throughout your system that reflect the server's name. This brief report shows how to quickly and efficiently change your server's name.

Renaming a SQL Server 7.0 Machine:

SQL Server 7.0 is the most difficult scenario for renaming your server since you must take an additional step that may or may not work. After you change the server name and reboot, SQL Server will say that it is not able to start. This is usually where you go and call Microsoft Support or post to a newsgroup. Before you do that though, rerun setup. The setup InstallShield will tell you that it is going to upgrade your system. This will change the registry entries. After that, reboot one more time then connect to the new server name in Query Analyzer. Run the following command:

```
sp_dropserver 'old server name'
```

```
sp_addserver 'new server name', 'local'
```

Finally, delete the entry in Enterprise Manager for the old server name and then you are done.

Renaming a SQL Server 2000 Machine:

SQL Server 2000 is much easier. After you change the server name and reboot SQL Server will automatically detect that you've changed the server name and then "fix itself". All you will have to do is connect to the new server name in Query Analyzer and run the following command:

```
sp_dropserver 'old server name'
```

```
sp_addserver 'new server name', 'local'
```

Delete the entry in Enterprise Manager for the old server name. You will have to stop and start the SQL Server service to complete the process.

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