

HP OpenView Service Desk 3.0

Documentation Addendum

Second Edition



Manufacturing Part Number: N/A

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Preface

This document is additional information for new features introduced with HP OpenView Service Desk 3.0 Service Pack 4. The new features include reporting, reconciliation and improvements in the command line interface tool.

The information in this document is suitable for a wide audience. The majority of information is suitable for most users. The reconciliation and Command Line interface features will be more suitable for system administrators.

This guide is organized as follows:

- Chapter 1, “Reporting,” on page 19 describes how you can create reports based on your Service Desk database entries.
- Chapter 2, “Reconciliation,” on page 35 provides details on how to perform reconciliation when you are using Data Exchange to minimize the amount of data imported into Service Desk by filtering out redundant items and relations.
- Chapter 3, “Opening Forms from the Command Line,” on page 45 provides information on configuring and using the command line executable. The executable can be started by other products to initialize specific parts of Service Desk.
- Chapter 4, “Multiple Sessions,” on page 55 explains how you can run more than one Service Desk client (with the same version number) on the same machine.
- Chapter 5, “Extraction Configuration Wizard,” on page 63 explains how to use the wizard. The extraction configuration wizard is part of Data Exchange and can be used to create and maintain export configuration files.
- Chapter 6, “Approval,” on page 89 explains how the approval feature in Service Desk can be used to effectively manage and authorize IT management processes.

Revision History

When an edition of a manual is issued with a software release, it has been reviewed and tested and is therefore considered correct at the date of publication. However, errors in the software or documentation that were unknown at the time of release, or important new developments, may necessitate the release of a service pack that includes revised documentation. Revised documentation may also be published on the Internet, see the section "We Welcome Your Comments!" below, for the URL.

A revised edition will display change bars in the left-hand margin to indicate revised text. These change bars will only mark the text that has been edited or inserted since the previous edition or revised edition.

When a revised edition of this document is published, the latest revised edition nullifies all previous editions.

Table 1 **Revision History**

Edition and Revision Number	Issue Date	Product Release
First Edition, <i>Approval and Extraction Configuration Wizard: User's Guide</i>	November 2000	Service Desk 3.0 Service Pack 3
Second Edition	March 2001	Service Desk 3.0, Service Pack 4

Related Publications

This section helps you find information that is related to the information in this guide. It gives an overview of the Service Desk documentation and lists other publications you may need to refer to when using this guide.

The Service Desk Documentation

Service Desk provides a selection of books and online help to assist you in using Service Desk and improve your understanding of the underlying concepts. This section illustrates what information is available and where you can find it.

NOTE

This section lists the publications provided with Service Desk 3.0. Updates of publications and additional publications may be provided in later service packs. For an overview of the documentation provided in service packs, please refer to the readme file of the latest service pack. The service packs and the latest versions of publications are available on the Internet. See the section “We Welcome Your Comments!” in this preface for the URLs.

- The `Readme.htm` file on the Service Desk CD-ROM contains information that will help you get started with Service Desk. It also contains any last-minute information that became available after the other documentation went to manufacturing.
- The *HP OpenView Service Desk: Release Notes* give a description of the features that Service Desk provides. In addition, they give information that helps you:
 - compare the current software’s features with those available in previous versions of the software;
 - solve known problems.

The Release Notes are available as a PDF file on the HP OpenView Service Desk 3.0 CD-ROM. The file name is `Release_Notes.pdf`.

- The *HP OpenView Service Desk: Supported Platforms List* contains information that helps you determine platform and software requirements and compatibility. It lists the combinations of platforms and software Service Desk 3.0 was tested on.

The Supported Platforms List is available as a PDF file on the HP OpenView Service Desk 3.0 CD-ROM. The file name is `Supported_Platforms_List.pdf`.

- The *HP OpenView Service Desk: Installation Guide* covers all aspects of installing Service Desk.

The Installation Guide is available as a PDF file on the HP OpenView Service Desk 3.0 CD-ROM. The file name is `Installation_Guide.pdf`.

- The *HP OpenView Service Desk: Data Exchange Administrator's Guide* explains how you can use data from other applications in Service Desk. It explains the underlying concepts of the data exchange process and gives step-by-step instructions on exporting data from external applications and importing it into Service Desk. The data exchange process includes importing single service events and batches of data.

The Data Exchange Administrator's Guide is available as a PDF file on the HP OpenView Service Desk 3.0 CD-ROM. The file name is `Data_Exchange.pdf`.

- The *HP OpenView Service Desk: API Programmer's Guide* contains information that will help you create customized integrations with Service Desk. This guide depicts the API structure, and explains some of the basic functions with examples for using the Application Programming Interface (API) provided with Service Desk. The API extends the HP OpenView Service Desk environment by providing independent programmatic access to data-centered functionality in the Service Desk application server environment.

The API Guide is available as a PDF file on the HP OpenView Service Desk 3.0 CD-ROM. The file name is `API_pg.pdf`.

- The *HP OpenView Service Desk: Data Dictionary* contains helpful information about the structure of the application.

The Data Dictionary is available as an HTML file on the HP OpenView Service Desk 3.0 CD-ROM. The file name is `Data_Dictionary.htm`.

- The *HP OpenView VantagePoint Service Desk 3.0 Computer Based Training (CBT)* CD-ROM is intended to assist you in learning about the functionality of HP OpenView VantagePoint Service Desk 3.0 from both a user and a system administrator perspective. The CD-ROM contains demonstration videos and accompanying texts that

explain and show how to perform a wide variety of tasks within the application. The CBT also explains the basic concepts of the Service Desk application.

The CBT is shipped automatically with the regular Service Desk software on a separate CD-ROM.

- The online help is an extensive information system providing:
 - procedural information to help you perform tasks, whether you are a novice or an experienced user;
 - background and overview information to help you improve your understanding of the underlying concepts and structure of Service Desk;
 - information about error messages that may appear when working with Service Desk, together with information on solving these errors;
 - help on help to learn more about the online help.

The online help is automatically installed as part of the Service Desk application and can be invoked from within Service Desk. See the following section entitled “Using the Online Help” for more information.


Reading PDF Files


You can view and print the PDF files with Adobe® Acrobat® Reader. This software is included on the HP OpenView Service Desk 3.0 CD-ROM. For installation instructions, see the `readme.htm` file on the CD-ROM.

The latest version of Adobe Acrobat Reader is also freely available from Adobe’s Internet site at <http://www.adobe.com>.

Using the Online Help

You can invoke help from within Service Desk in the following ways:

- To get help for the window or dialog box you are working in, do one of the following:
 - Press **F1**.
 - Click the help toolbar button .
 - Choose **Help** from the **Help** menu.

— Click the help command button  in a dialog box.

- To search for help on a specific subject using the table of contents or the index of the help system: choose Help Contents & Index from the Help menu.



When you are in the help viewer, you can find help on how to use the help system itself by clicking the Help toolbar button:




Service Desk also provides *tooltips* and “What’s This?” help for screen items like buttons, boxes, and menus.

A *tooltip* is a short description of a screen item. To view a tooltip, rest the mouse pointer on the screen item. The tooltip will appear at the position of the mouse pointer.

“What’s This?” help is a brief explanation of how to use a screen item. “What’s This?” help generally gives more information than tooltips. To view “What’s This?” help:

1. First activate the “What’s This?” mouse pointer in one of the following ways:
 - Press **Shift+F1**.
 - Click the “What’s This?” toolbar button .
 - Choose What’s This? from the Help menu.
 - In dialog boxes, click the question mark button  in the title bar.

The mouse pointer changes to a “What’s This?” mouse pointer .

2. Then click the screen item for which you want information. The “What’s This?” help information appears in a pop-up window.

To close the pop-up window, click anywhere on the screen or press any key on your keyboard.

Typographic Conventions

The table below illustrates the typographic conventions used in this guide.

Font	What the Font Represents	Example
<i>Italic</i>	References to book titles Emphasized text	See also the <i>HP OpenView Service Desk: Installation Guide</i> . <i>Do not delete</i> the System user.
Bold	First-time use of a term that is explained in the glossary	The service call is the basis for incident registration.
Courier	Menu names Menu commands Button names File names Computer-generated output, such as command lines and program listings	You can adjust the data view with the commands in the View menu. Choose Save from the menu. Click Add to open the Add Service Call dialog box. To start the installation, double-click setup.htm. If the system displays the text C:\>dir a: The device is not ready then check if the disk is placed in the disk drive.
Courier bold	User input: text that you must enter in a box or after a command line	If the service call must be solved within 30 minutes, enter 30 .
<i>Courier italic</i>	Replaceable text: text that you must replace by the text that is appropriate for your situation	Go to the folder X:\Setup, where X is your CD-ROM drive.
Helvetica bold	Keyboard keys A plus sign (+) means you must press the first key (Ctrl in the example), hold it, and then press the second key (F1 in the example).	Press Ctrl+F1 .

We Welcome Your Comments!

Your comments and suggestions help us understand your needs, and better meet them. We are interested in what you think of this manual and invite you to alert us to problems or suggest improvements. You can submit your comments through the Internet, using the HP OpenView Documentation Comments Web site at the following URL:

http://ovweb.external.hp.com/lpe/comm_serv

If you encounter *serious errors* that impair your ability to use the product, please contact the HP Response Center or your support representative.

The latest versions of OpenView product manuals, including Service Desk manuals, are available on the HP OpenView Manuals Web site at the following URL:

http://ovweb.external.hp.com/lpe/doc_serv

Software patches and documentation updates that occur after a product release, will be available on the HP OpenView Patches Web site at the following URL:

<http://ovweb.external.hp.com/cpe/patches>

1 Reporting

This chapter describes how you can create database views and a data dictionary for use by your third-party reporting tool. Using the information provided in this chapter, you can create reports based on your Service Desk database entries.

Introduction

The delivery of business-critical IT services depends on prompt decision making. Steps within the IT management process may need to be reviewed to monitor agreed-upon service levels. When reviewing IT management processes, it is counter-productive and time-consuming to manually track issues.

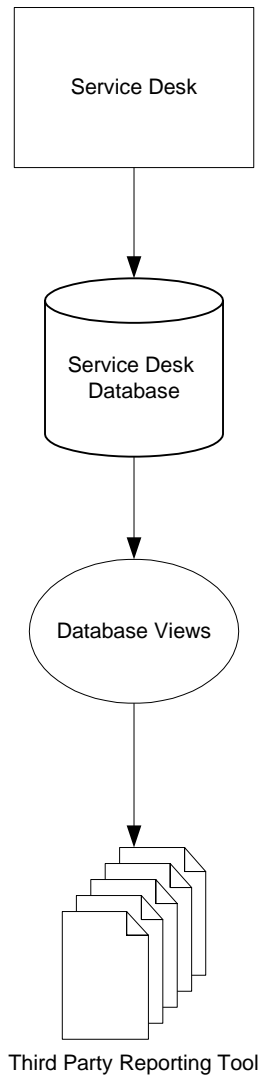
Using Service Desk, you can create reports that provide an effective method of managing your IT management processes.

Overview of Reporting

Reporting provides flexibility and convenience for reviewing past, managing current, and forecasting future infrastructure needs. For example, you want to monitor the performance of a configuration item. By printing a report of all service calls for a particular CI, you can view statistics on the average availability of a CI based on any specified time period.

Your Service Desk database provides the information used as a basis for your reporting tool. Your reporting tool, such as Business Objects, Crystal Reports, Microsoft Access, or Microsoft Excel, can access the information stored in Service Desk when you create database views and a data dictionary. When using an Oracle based Service Desk database, your reporting tool can view Service Desk entries using the ODBC or SQL drivers. When using an SQLServer based Service Desk database, your reporting tool can view the Service Desk entries using ODBC or SQL drivers. Service Desk, however, recommends using specified drivers, ODBC drivers with Oracle and SQL drivers with SQLServer, for performance optimization. Using queries defined in your Service Desk database views, you provide a view into your database which can be imported by your reporting tool to create professional reports, as depicted in Figure 1-1.

Figure 1-1 **Reporting Process**



Generating Database Views

The first step in the Reporting process is the generation of database views. Using database views, you can create a professional report, for example, by using the Crystal Report Wizard.

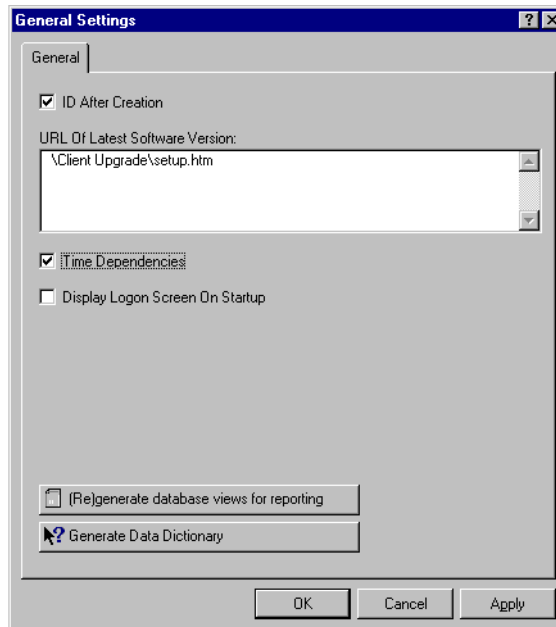
Service Desk gives you control over which parts of your database you can use. For this reason, you need to take additional steps to create the specific views into your database. Each view determines what information you want to form the basis of your report.

Database views are localized based on the language of your third-party reporting tool.

To generate database views:

1. In Service Desk, choose `System` from the `Tools` menu. The `Administrator Console` is displayed.
2. In the `Administrator Console`, select the `System Panel` icon.
3. Double-click the `General Settings` icon. The `General Settings` dialog box is displayed.

Figure 1-2 **General Settings**



4. Click (Re)generate database views for reporting.
5. Select a time zone in the Generate Reporting Database Views Do You want to Continue dialog box. A time zone must be selected from the drop-down list.

Figure 1-3 **Selecting a Time Zone for Database Views**



6. In the Warning dialog box, click Yes to continue generating database views.
7. Service Desk will generate the database views.
8. Close the General Settings dialog box by clicking OK or Apply.

Generating a Data Dictionary

Data is stored in a variety of places and forms. You may have placed your data in one or two separate databases or your specialists may have defined tables and fields in what they consider a logical manner but which other members of your company may not understand. As a result, providing members of your IT infrastructure the ability to import Service Desk entries into a reporting tool may create problems and compromise your data's integrity.

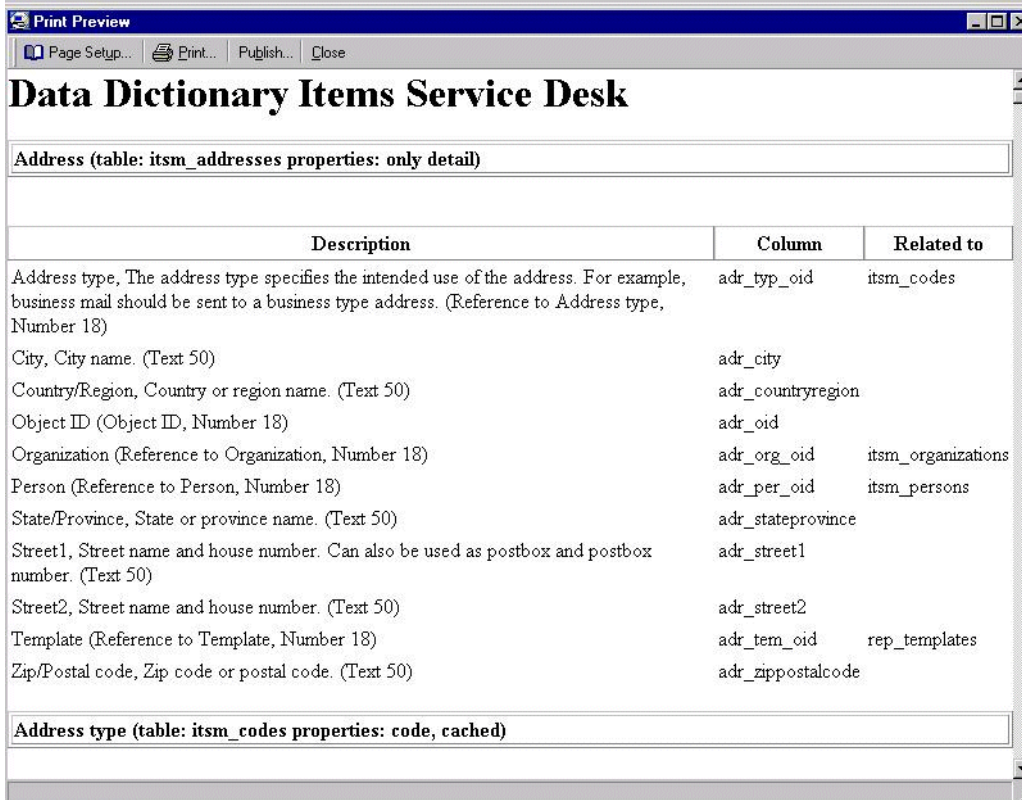
A Data Dictionary which defines all IT infrastructure terms helps ensure that there is a general understanding of all terms and that your company's database integrity remains intact. By creating a Data Dictionary, your staff will have data easily accessible in a format that they can understand.

When a Data Dictionary is used to help define information contained in reports, only data which is used in the report can be accessed via the Data Dictionary. You cannot simultaneously use the Data Dictionary and another data source in the same report.

To generate a Data Dictionary:

1. In Service Desk, choose `System` from the `Tools` menu. The `Administrator Console` is displayed.
2. In the `Administrator Console`, select the `System Panel` icon.
3. Double-click the `General Settings` icon. The `General Settings` dialog box is displayed.
4. In the `General Settings` dialog box, click the `Generate Data Dictionary` button. The `Print Preview` appears on your screen.

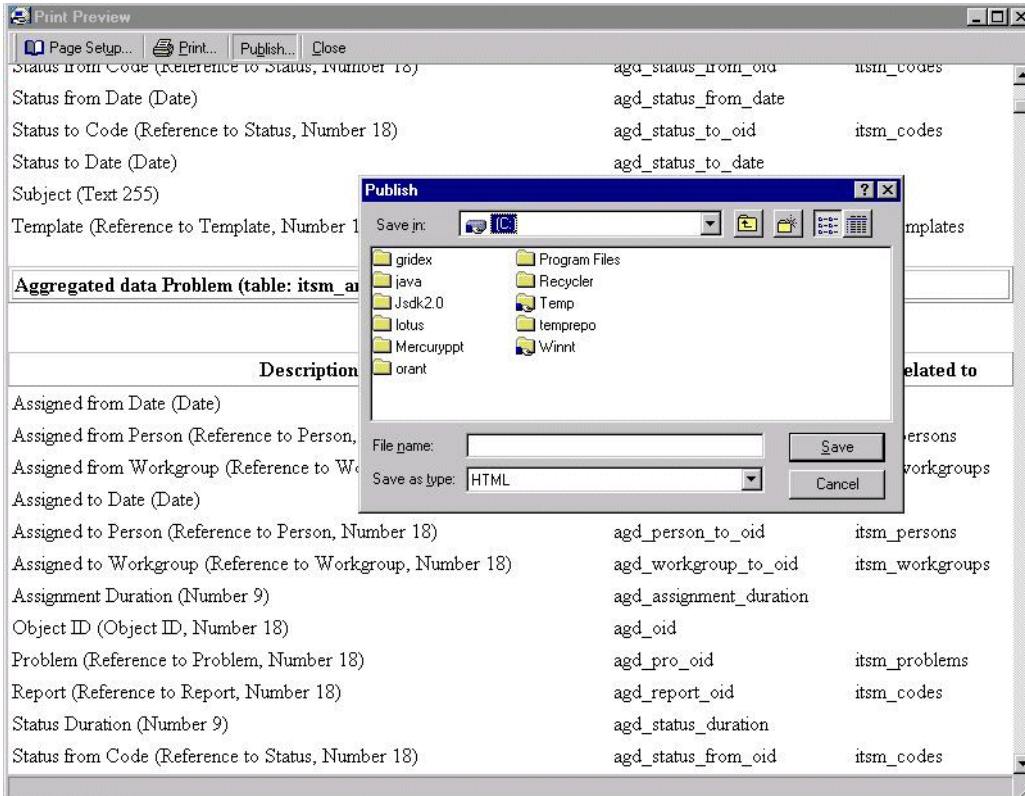
Figure 1-4 Print Preview of a Data Dictionary



5. You can choose to print or publish the Data Dictionary.

- Create a report in HTML format using your reporting tool by selecting **Publish** from the toolbar to save the Data Dictionary in HTML format; or
- Print your report using your reporting tool by selecting **Print** from the toolbar to print the Data Dictionary.

Figure 1-5 Publishing a Data Dictionary in HTML Format



6. Click **Close** in the Data Dictionary Print Preview.
7. Click **Close** in the General Settings dialog box.

Viewing Database Reporting Tables

After you have generated the database views and created the data dictionary, you will need to access the database. Consult your database administrator for the user name and password to access the database tables.

When viewing the database tables, you will note that all views created for reports have the prefix V_.

NOTE

In addition to operational data, repository data such as account information will be displayed in the database views. Although you cannot modify data using the database views, you will be able to view all repository information in the reporting tables.

You can import the database views with the V_ prefix into your reporting tool.

Using Database Views: Examples with Third-Party Reporting Tools

After creating your database views, you can use the views to create reports from your Service Desk database without requiring database command knowledge. Your third-party reporting tool accesses database tables to produce a report that you can edit and format, combining items such as data, charts, pictures and sound.

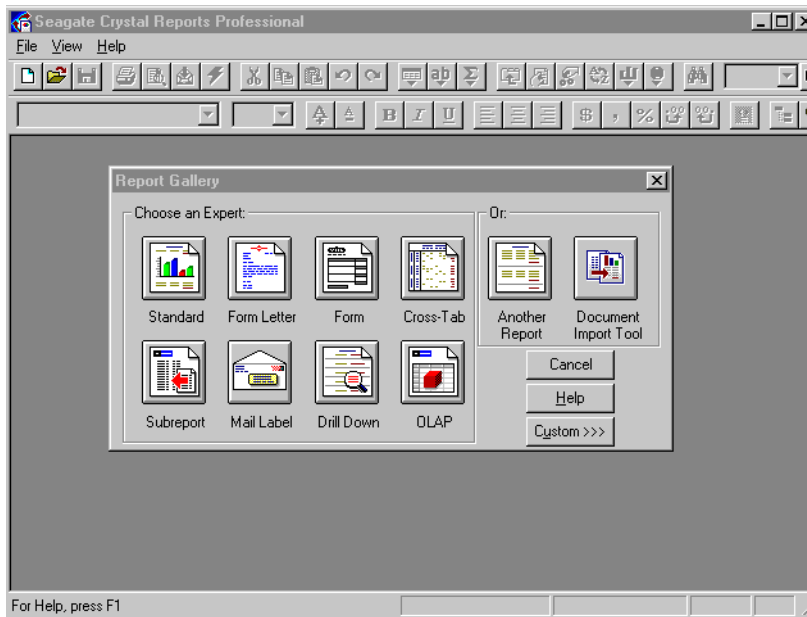
Because third-party reporting tools use visual layout approach, you can specify the data that you want to appear to edit and format reports. You can decide the report format, using drag and drop techniques to arrange data, graphics, charts and text.

Creating Reports with Crystal Reports Designer

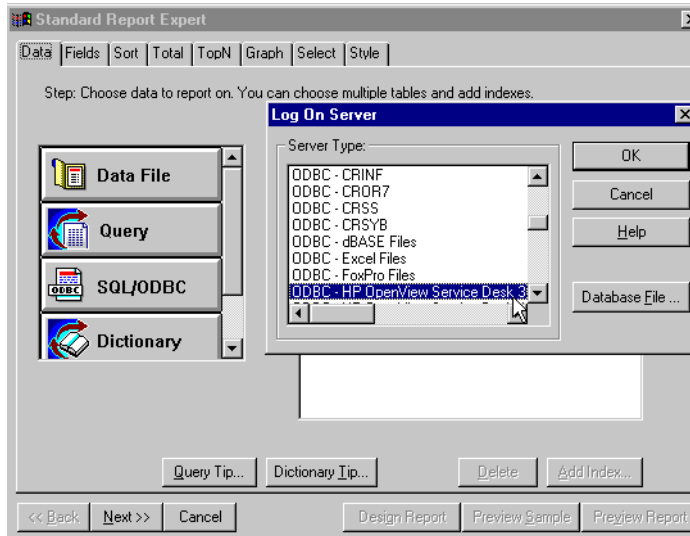
To create a new report based on Service Desk database views:

1. From the `File` menu, select `New`. The Report Gallery appears.

Figure 1-6 Crystal Reports Gallery



2. Select any report. For our example, we will choose Standard. The form Report Expert will appear.
3. Click SQL/ODBC. The Log On Server dialog box appears.

Figure 1-7 Crystal Reports Log On Server Dialog Box

4. You must log on to the database where your Service Desk views were created. In our example, we are using HP OpenView Service Desk 3.0 and we select ODBC-HP OpenView Service Desk 3.0. The Choose SQL Table dialog box appears.
5. In the Choose SQL Table dialog box, select all file types. Database view files will have the prefix V_. Double-click the database view files to be used in your report.
6. The database views which will be included in your report will appear in the Report Expert Fields pane. When finished, click Done.
7. Click the Fields tab in the Report Expert dialog box.
8. In the Database Fields pane, double-click the fields from your views to be included on your report. The selected database fields will appear in the Report Fields pane.
9. Click the Sort tab. Select a database view field to sort data. For additional information, please refer to *Seagate Crystal Reports User's Guide*.
10. Click the Graph tab. Select a format for your report graph by clicking the Crystal Chart Type or selecting Custom Chart to create your own. For additional information, please refer to *Seagate Crystal Reports User's Guide*.

11. Click the `Style` tab. You can design a report by adding a company logo, or making other stylistic changes. For additional information, please refer to *Seagate Crystal Reports User's Guide*.
12. When finished, click `Design Report`. The report you have created with your Service Desk database views will be displayed.

Adding Database Views to Existing Reports

Database views that you have generated can be added to existing reports. You can add Service Desk data to a company prospectus, for example. A report initially designed for financial information could import Service Desk database views and present IT infrastructure management statistics.

To add database views to an existing report:

1. Select `Add Database to Report` from the `Database` menu. The `Choose SQL Table` dialog box will appear.
2. Select the Service Desk database view files to include in your report. The database view files will have a `V_` prefix.
3. The `Visual Linking Expert` will appear. Click `OK`.

NOTE

The `Visual Linking Expert` helps you link two or more database tables. For additional information on using the `Visual Linking Expert`, please refer to *Seagate Crystal Reports User's Guide*.

Creating Reports with Business Objects Designer

Business Objects utilizes universes to display database data without requiring users have technical knowledge of databases. Universes are a tool to provide information on data in understandable terms.

Universes consist of classes and objects. For example, objects in a Service Desk database view could be configuration items, organizations, service calls, service call numbers, etc. By grouping objects together, you form classes. Classes group objects to form a general description. Each object links to data directly in your database view.

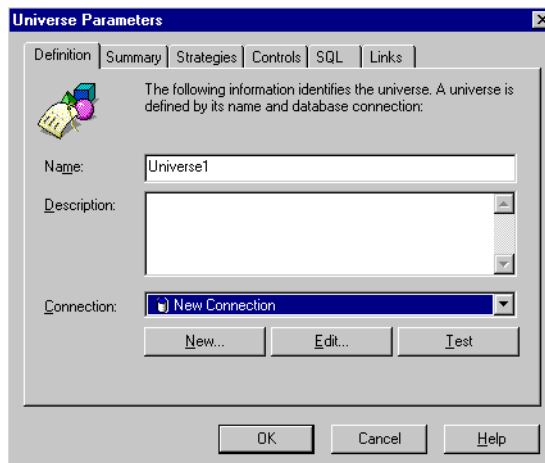
Universes provide the ability to query data to incorporate in your

reports. When creating a query in Business Objects, you select objects from the universe and run a query on those objects.

To create a universe to access your database view:

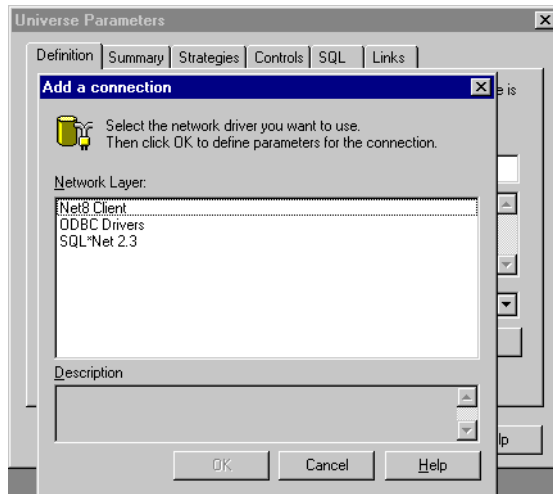
1. Start Business Objects Report Designer.
2. Select **New** from the **File** menu. The **Universe Parameters** dialog box appears.

Figure 1-8 Business Objects Universe Parameters Dialog Box



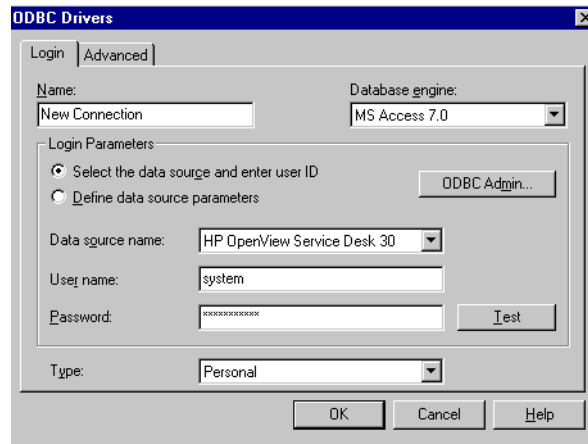
3. Enter a name for your universe in the **Name** field.
4. You will need to provide your universe with access to Service Desk data. To do this, you will need to indicate the database and the type of network you are working with and set the parameters to access the database views stored in your Service Desk database. Create a new connection for your universe by clicking **New**.
5. The **Add a Connection** dialog box will appear.

Figure 1-9 Business Objects Add a Connection Dialog Box



6. Select the network driver for your Service Desk database. For our example, we will select ODBC Drivers. Click OK.
7. Enter a name for the connection in the Name field.
8. Select a database engine from the Database engine drop-down list.

Figure 1-10 Business Objects ODBC Drivers Dialog Box



9. Select HP OpenView Service Desk 3.0 from the Data Source Name drop-down list.

10. Enter a user's name and password for the Service Desk database.
11. Click OK.
12. Select `Tables` from the `Insert` menu.
13. In the `Table` dialog box, click the database views you want to add to the universe structure. The database views will have the prefix `V_`.
To add several database views, hold down the `Control` key while clicking each database view.
14. Click `Insert`.

When you have finished designing your report, you can use your basic design to create professional reports. For additional information, refer to the *Business Objects User's Manual*.

2

Reconciliation

The Reconciliation feature in Data Exchange minimizes the amount of data imported into Service Desk by filtering out redundant items. A reconciliation change list is created that identifies obsolete objects that may require manual removal from Service Desk.

Reconciling your Data

The Reconciliation process filters out redundant information so that only the changes in your data are imported, thus reducing the load on your resources. This is accomplished by comparing the most recently exported data exchange XML file with the data exchange XML file currently exported. The differences between the two files are then recorded into an additional XML file for importing into Service Desk. To use the reconciliation feature you must have a valid Data Exchange xml file for comparison purposes. During the import process the current xml file will be compared to the older xml file. The following tables explain which items and relations will be imported:

Table 2-1 **Decision Matrix for Importing Items**

Item in previous exchange file?	Item in current exchange file?	Changes to the item's attributes?	How is item processed?
No	Yes	Not Applicable	Import item
Yes	No	Not Applicable	Remove item manually
Yes	Yes	No	No action taken
Yes	Yes	Yes	Import item

Table 2-2 **Decision Matrix for Importing Relations**

Item in previous exchange file?	Item in current exchange file?	Is the relation new or changed?	Has the relation been removed?	How will relation be processed.
No	Yes	Yes	Not Applicable	Import relation
Yes	No	Not Applicable	Yes	Remove relation manually

Table 2-2 **Decision Matrix for Importing Relations**

Item in previous exchange file?	Item in current exchange file?	Is the relation new or changed?	Has the relation been removed?	How will relation be processed.
Yes	Yes	No	No	No action taken
Yes	Yes	Yes	No	Import relation
Yes	Yes	No	Yes	Remove relation manually

Delta Processing

The option to import your reconciled data is called delta processing and is set in the Data Exchange dialog box. When this option is selected, new items and relations will automatically be imported. Modified items and relations will automatically be updated. Redundant (obsolete) items and relations will need to be removed manually, See “Removing Redundant Items and Relations” on page 40.

To set the Delta processing option in the Data Exchange dialog box:

1. Open an existing Data Exchange task or create a new Data Exchange task. Refer to the Data Exchange Administrator's Guide or the Online help for more information.
2. Place a check in the Use delta processing check box. It is located in the lower half of the dialog box:

Figure 2-1 **Setting the Reconciliation Option in Data Exchange**

Export data from a storage device

Select a configuration file for extracting data:

Export mapping: dta5.ini Edit...

Export data to or import data from file

Exchange file: dta.xml Browse... View...

Import data into Service Desk database

Select import settings

Account: DTA 5 Account icon

Password: xxxxxxxx

Import mapping: dta

Debug New... Modify... Remove

Use delta processing

Previous excha... dta_200101101644.xml Browse... View...

3. In the Previous Exchange field, enter the previous data exchange xml file you will use to compare with the current data exchange xml file. A Browse button is available below the field, for locating the file. A date and time will be automatically added to your data exchange xml file during the data exchange process. The date format is yyyy/mm/dd/HH:mm, for example DTA_200101101644.xml refers to 2001, January, 10th, 16:44.

Reconciling Data from a Command Line

You can use a command line to call `sd_import` for importing data using reconciliation. The command structure is:

```
sd_import  
<username><password><server><mapping><datafile><debugging>  
<logfile><temp dir><reconciliation data  
file><reconciliation change list>
```

For more information about running Data Exchange from the command line, refer to the Data Exchange Administrator's Guide. An example command line using reconciliation follows:

```
sd_import system servicedesk LOCALHOST dta5 dta5.xml Y  
dta5_imp.log c:\temp dta5_200101101645.xml dta5_changes.log
```

Removing Redundant Items and Relations

During the reconciliation process a change log is created recording all new, modified and redundant items and relations. To complete the reconciliation process in Service Desk you will need to remove redundant items and relations manually, see Table 2-2, "Decision Matrix for Importing Relations," on page 36, and Table 2-1, "Decision Matrix for Importing Items," on page 36. By using the change log you can quickly find the items and relations that have become obsolete. Every item is recorded with key fields and values, making it possible to locate those items quickly in Service Desk.

The change log is created in the `data_exchange/log` directory with the current date and time. For example, `DTA_Changes_200101101644.log`. In the following example the REDUNDANT ENTITIES and REDUNDANT RELATIONS sections contain information that will help you locate those items that you will probably want to manually removal from Service Desk:

Example 2-1

Change Log File

Change Log File

ChangeList of delta processing on files

e:\a.xml (new situation) and

e:\b.xml (old situation).

Date of import: Wed, 10/01/2001 16:44:19

NEW ENTITIES

=====

CL_CI with ID 282 with key-values:

CI_ID : 1000000677

UPDATED ENTITIES

=====

CL_CI with ID 375 with key-values:

CI_ID : 1000000887

CL_CI with ID 676 with key-values:

CI_ID : 1000001347

CL_CI with ID 911 with key-values:

CI_ID : 1000001860

REDUNDANT ENTITIES

=====

CL_CI with ID 105 with key-values:

CI_ID : 1000000945

NEW RELATIONS

=====

relation between

CL_CI_COMPONENT_CHILD with ID 1356 with key-values:

CI_ID : 1000001279

and

CL_CI_COMPONENT_PARENT with ID 1350 with key-values:

no key-values

relation between

CL_CI_COMPONENT_CHILD with ID 1436 with key-values:

Reconciliation Delta Processing

```
        CI_ID : 1000001302
and
        CL_CI_COMPONENT_PARENT with ID 1432 with key-values:
        no key-values
REDUNDANT RELATIONS
=====
relation between
        CL_CI_COMPONENT_CHILD with ID 1356 with key-values:
        CI_ID : 1000001279
and
        CL_CI_COMPONENT_PARENT with ID 1352 with key-values:
        CI_ID : 1000001275
relation between
        CL_CI_COMPONENT_CHILD with ID 1436 with key-values:
        CI_ID : 1000001302
and
        CL_CI_COMPONENT_PARENT with ID 1434 with key-values:
        CI_ID : 1000001297
```

Finding the Items in Service Desk

The change list describes the changed items and relations with their class names and field names as in the xml file. To find the items and relations, you will need to follow the import mapping created for the item. In the import mapping, for example, class `CL_CI` from the xml file is mapped to the Service Desk item `Configuration Item`. The property `CI_ID` from the xml file is mapped to the `ID` field in Service Desk.

From the example change list the following entry represents an item in Service Desk that needs to be located and removed:

```
REDUNDANT ENTITIES
=====
CL_CI with ID 105 with key-values:
```

CI_ID : 1000000945

To locate the obsolete item, look for the Configuration Item in Service Desk and search for ID 105.

Memory Usage

The values of all key fields are cached during import to make it possible to locate parent items and relations when processing a relation. The smallest memory format practical is used.

Reconciliation
Delta Processing

3 Opening Forms from the Command Line

Included with Service Desk is an executable that can be started by other products to initialize specific parts of Service Desk.

Examples of Use

The command-line interface can be used in various integrations. In a command-line integration an external application calls Service Desk classes and passes arguments in the call. The call can be made through the DOS prompt.

For example: helpdesks often make use of CTI (Computer Telephony Integration) applications. CTI applications are used to route telephone calls automatically to the right help desk employee. The CTI application can call external programs, passing the telephone number of the caller over the command line. The command string passed over the command line can identify and search for all previous or open Service Calls from that caller. The helpdesk employee can then see an overview of the service calls logged by the caller in the Command Line Interface before picking up the telephone.

NOTE

The application kicking off the command line action and Service Desk (client) must be installed on the same computer.

Defining a command line argument

Use the executable `SDDataForm.exe` to open a specific form in Service Desk from the command line of another application. The form can be a standard form, or one created specially for the purpose, but the form must exist before it can be called by the executable. You will need to know the exact name of the form for the command line argument. Forms are created and edited in the `Form Designer` feature of the administrators console. To open the `Form Designer` select `System` from the `Tools` menu, then open the `Forms` branch from the `Presentation` node.

Command Line Syntax

The syntax for the command line is:

```
<service desk path\bin> SDDataForm.exe <Form name> <Display option> <Search criteria>
```

For example:

```
SDDataForm.exe "Service call" -ListAlways ID=200
```

The above example searches for the form `Service Call`, and any service call records with the ID number `200`. The results are displayed in the `Search Results` dialog box even if no matching database records are found. Each element of the command line argument is described below.

General Rules for Arguments

When composing command line arguments, the following points should be kept in mind:

- Whenever a form name or field name value contains any character not recognised by DOS or that DOS gives a different meaning (for example a space, `'` `>` symbol, or a period) the name must be included in quotation marks.
- All arguments are case-sensitive.
- The search value entered in the command line argument must be identical in format to the value stored in the database. For example, if a CTI application identifies a telephone number of an incoming call as

0123456789, but the number is stored on the database as 012 345 6789 (with spaces), no occurrences of the telephone number will be found, and the search will fail.

- Command Line arguments must contain the path variable unless the DOS command indicates the correct directory (folder) at the DOS prompt. The executable file `SDDataForm.exe` is located in the Service Desk \bin folder of both the client and server installations.
- The client user must have access rights to the form being called.

Command Line Executable

The executable file used by Service Desk to do a database search, and open forms from data passed via the command line is `SDDataForm.exe`. This executable is located in the Service Desk \bin folder of both the server and client installations.

`SDDataForm.exe` must be named first in the command line string unless DOS needs to be told where to find it, this will not be necessary if the DOS prompt is already in the \bin directory. If the prompt is not in the right directory the path for `SDDataForm.exe` must be inserted first in the string.

Form Name

The first argument in the command string must be the name of an existing form. If two or more forms have the same name, the first one created will be used.

To find the form names, do the following:

- Step 1.** In Service Desk, choose `System` from the `Tools` menu. The `Administrator Console` dialog box is displayed.
- Step 2.** In the `Administrator Console`, select the `System Panel` node and double click the `General Settings` icon. The `General Settings` dialog box is displayed.
- Step 3.** In the `General Settings` dialog box, click the `Generate Data Dictionary` button. An HTML file is created.
- Step 4.** In the generated HTML file find the form name you want.

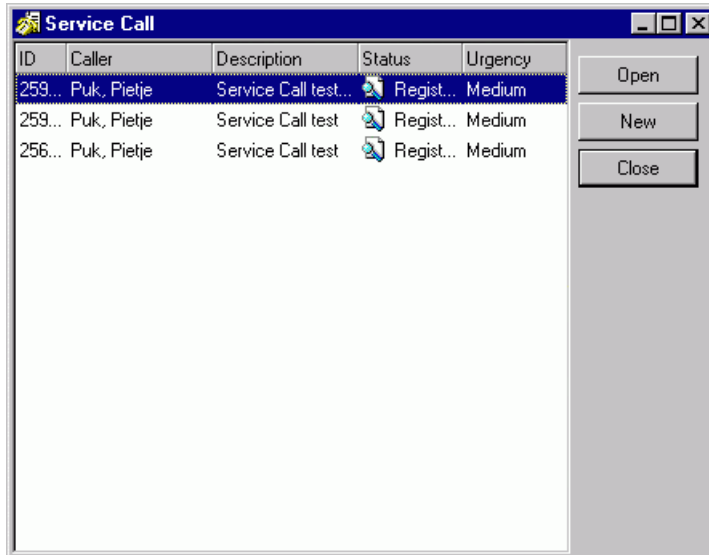
Display Options

The display options define how the results of the database search are treated. There are three possible outcomes of any database search, no matching records are found, one matching record is found, or multiple matching records are found. How Service Desk responds to these three possibilities can be defined using one of three display options:

- No option defined. The Service Desk default is that if you do not define a specific display option, the following actions will occur: when no records are returned from the search a new form will be opened, when a single record is returned, this record will be opened automatically in Modify mode, when multiple records are found the Search Results dialog box will open displaying a list of all returned records.
- `-ListAlways` will cause the Search Results dialog box to be displayed even when no records, or only one record is returned. The user will have to click the `New` button if they then want to create a new record.
- `-ForceNew` will cause a new instance of the named form to be displayed, regardless of any search criteria.

When Service Desk finds more than one item in a search, or when the display option is set as `ListAlways`, the Search Result dialog box is shown. To open an item shown in the Search Result dialog box select it and click `Open`.

Figure 3-1 CLI Search Results dialog box



Search Criteria

Search criteria are optional, however if no criteria are set then all instances of the named form in the database will be retrieved and displayed in the Search Results dialog box. Multiple criteria can be defined.

The search criteria syntax is:

FieldnameOperatorValue

There must be no spaces between the three elements of the search criteria; Field Name, Operator and Value. Spaces are allowed in the Field Name or in the Value as long as the whole name or value is enclosed in quotation marks. For example:

`Location=B1R103 "Outsourced to=HP"`

will find all configuration items located at location B1R103 that are outsourced to HP.

Field Name

To find the field names you need, do the following:

- Step 1.** In Service Desk, choose `System` from the `Tools` menu.
- Step 2.** In the `Administrator Console`, open the `Presentation` node and then the `Forms` node.
- Step 3.** Find the `Form` you want.
- Step 4.** Double-click the `Form` title to open the form.
- Step 5.** The fields available for inclusion in the form are listed in the `Attributes` dialog box, only the fields currently used in the form and thus displayed in the `Form Designer` dialog box, should be used for a command line initiated search.

Extended field names

You can use the fields of related items to find a service call. If you use field names of related items, the field name is extended with the item name. Use a period to separate the item name from the field name. For example, to open service calls using the caller's telephone number, you can use the field name: `Caller.PrimaryTelephoneNumber`. Or, to open a configuration item using the location's search code where the configuration item is placed, use: `Location.searchcode`.

NOTE

To get flavour of what field names and extended field names are possible, open the `Advanced Find` dialog box. In the `Advanced Find` dialog box, click the `Advanced` tab and then click `Fields`. The names in the fields list can be used as field names. Names in submenus of the fields list must be used as extended field names.

Operators

You can use the operators shown in the following table:

Operator (Text)	Operator (Symbol)	Usage
Equal	=	is equal to
NotEqual	!=	is not equal to
GreaterThan	>	is greater than

Opening Forms from the Command Line
 Defining a command line argument

Operator (Text)	Operator (Symbol)	Usage
GreaterThanOrEqualTo	>=	is greater than or equal to
LessThan	<	is less than
LessThanOrEqualTo	<=	is less than or equal to
Between		is included in the range defined by two values. Separate values with AND. Text strings with spaces or illegal characters should be identified by quotation marks.
NotBetween		is excluded from the range defined by two values. Separate values with AND. Text strings with spaces or illegal characters should be identified by quotation marks.
Contains		is one of a list. Separate values with AND or OR. Text strings with spaces or illegal characters should be identified by quotation marks.
NotContains		is not one of a list. Separate values with AND or OR. Text strings with spaces or illegal characters should be identified by quotation marks.
Empty		is empty (no value given, NULL)
NotEmpty		is not empty (value given, not equal to NULL)
Yesterday		date is equal to yesterday's date (system date -1)

Operator (Text)	Operator (Symbol)	Usage
Today		date is equal to today's date (system date)
Tomorrow		date is equal to tomorrow's date (system date +1)
Last7Days		date is one of the last seven days (Between system date and system date -7)
Next7Days		date is one of the next seven days (Between system date and system date +7)
LastWeek		date is one of the days of the last working week
ThisWeek		date is one of the days of this working week
NextWeek		date is one of the days of the next working week
LastMonth		date is one of last month
ThisMonth		date is one of this month
NextMonth		date is one of next month
StartsWith		text starts with, if the text string has spaces or illegal characters the string should be identified by quotation marks.

Standard DOS wildcards (*, ?) can also be used in values, for example: sm* will find Smith, Smythe, Smit, etc.

Whenever the text version of an operator is used it must be contained in square brackets, with no spaces around it. For example:

ID[Equal]251

NOTE

If you want the data found by the search criteria to be inserted automatically in the named form when a new form is called, insert a + symbol before each search criteria in the string that you want to be included in the form. If the criteria is contained by quotation marks, because of a space or illegal character, place the + symbol inside the quotes.

Value

The value searched for must be entered in the correct format for anything to be found, and if that value format contains a space or other illegal character, such as a period, the value must be contained in quotation marks.

To find an item on a date, use the date format specified in the system settings of your computer, for example on April 27, 2001 use: 27/04/2001. The date format depends on the system settings of your computer.

Search codes must be capitalized. To find an item on a search code, for example for Steven Barns use: **BARNSS**.

4 **Multiple Sessions**

Service Desk allows more than one Service Desk client (with the same version number) to be run together on the same machine.

Using multiple sessions

Use multiple sessions when you want to have multiple client installations of the same version of Service Desk connecting to different application servers with different databases. This need could arise when you have different application servers (and databases) for testing, development, and production (live system), or multiple production environments.

Do not use multiple sessions for different users on the same machine; this should be done by setting up proper profiles for each user within the operating system.

Defining Multi-Session Parameters

To use multi-sessions, the cache, account details, and user definable information must be separated, and stored locally on the client machine. This is done by setting up /PROFILE and /USERFOLDER parameters that are read when Service Desk is started up.

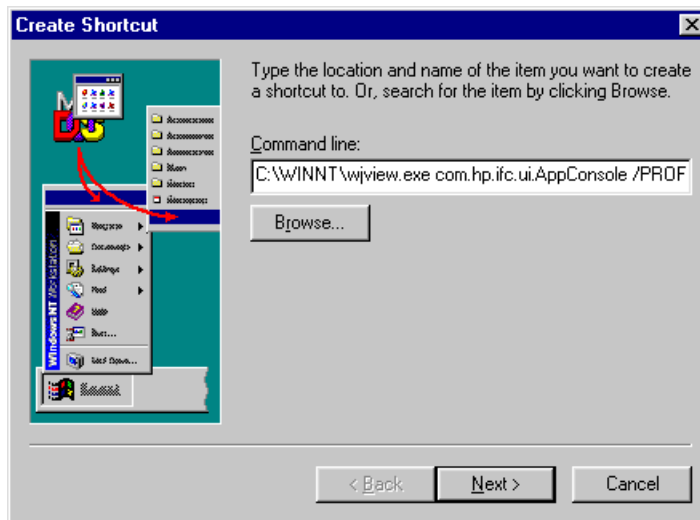
Multi-sessions are created using shortcuts. To set up multi-session shortcuts on Windows NT4:

1. Right-click on the desktop and select `New` from the popup menu and then `Shortcut` from the submenu. The `Create Shortcut` wizard is started.
2. In the `Command line field` type:

```
C:\WINNT\wjview.exe com.hp.ifc.ui.AppConsole  
/PROFILE=clientAS1 /USERFOLDER="C:\Program  
Files\Hewlett Packard\OpenView\Service Desk  
3.0\Client\clientAS1"
```

You can replace the term "clientAS1" with anything you like; however it must be the same in both places.

Figure 4-1 **Shortcut Wizard Command Line dialog box**

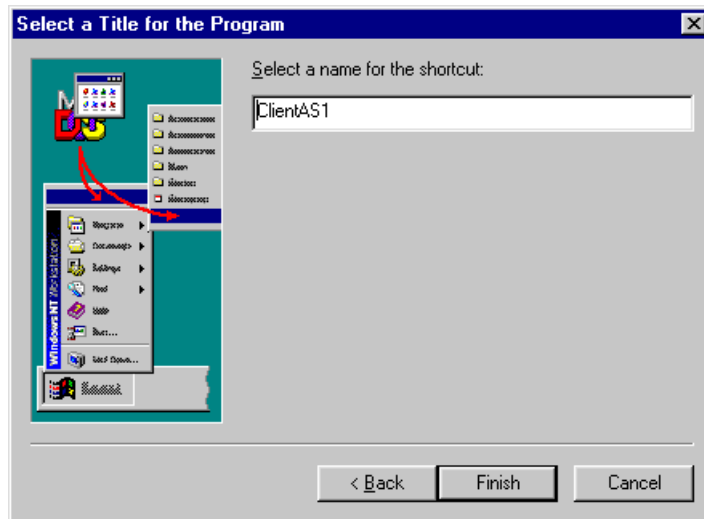


NOTE

The path parameters depend on where `wjview.exe` and the Service Desk folder are located on the machine. On Windows 2000 `wjview.exe` should be found in the `System32` folder and on Windows 95/98 in the `Windows` folder.

-
3. Click `Next` and enter a name for the shortcut, for example: `Service Desk Client AS1`. Then click `Finish`.

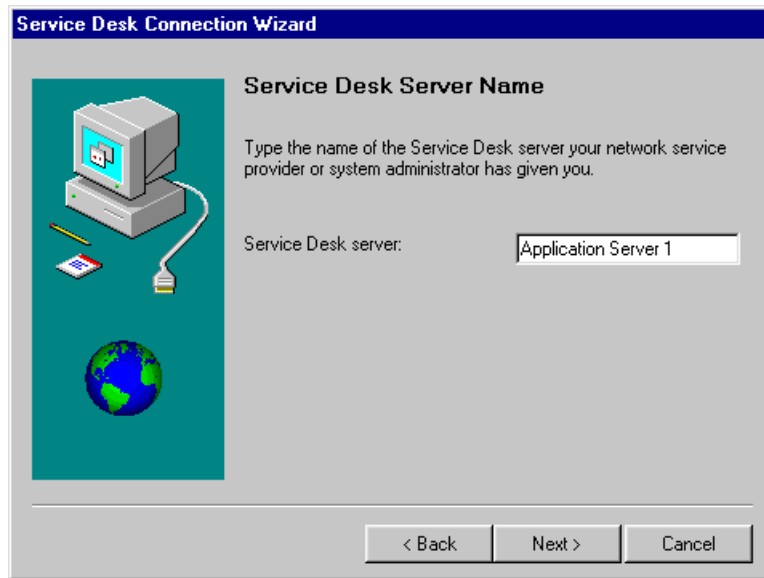
Figure 4-2 **Shortcut Wizard Shortcut Name**



Once you have created the shortcut, the instance of the client software that is started by it still has to be connected to an application server and database. This must be repeated for each client shortcut you create.

1. When you use the shortcut for the first time, the “Get connected” wizard is started. You will be prompted for the application server name (for example, Application Server 1). Click **Next**.

Figure 4-3 Connection wizard Server Name dialog box



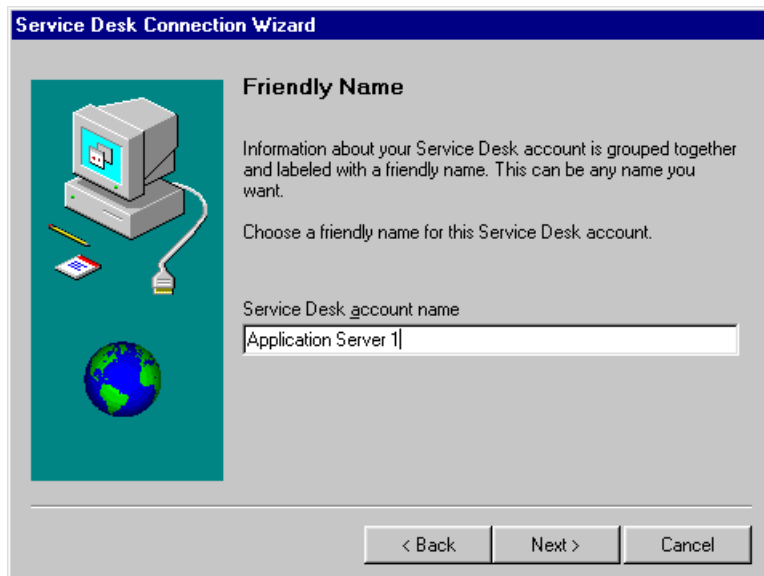
2. Enter the Account Name and Password for the application server that the client should connect to. Click **Next**.

Figure 4-4 Connection Wizard Account Name dialog box



3. Enter a Friendly Name for the application server account name.

Figure 4-5 Connection Wizard Friendly Name dialog box



4. Click `Next` and then `Finish`. The Client shortcut will now connect to the application server with the specified account name.

When the client is running you will be able to identify each multi-session client you are using by the title bar and the task bar of the application window. This will show the `/PROFILE` parameter value, for example: `clientAS1`.

Service Desk Accounts

For each Client shortcut you create you will also need to create an Application Server Account shortcut. This will enable you to add, modify, view, or remove the account associated with the Client shortcut.

To create an Application Server Accounts shortcut, follow the instructions for creating a Client shortcut above, but modify the command line path to:

```
C:\WINNT\wjview.exe  
com.hp.ifc.ui.options.AppServerAccountsDialog  
/PROFILE=clientAS1 /USERFOLDER="C:\Program Files\Hewlett  
Packard\OpenView\Service Desk 3.0\Client\clientAS1"
```

Logically you should name this shortcut to relate to the client shortcut, particularly if you are going to have a number shortcuts. As with the Client, the dialog boxes started from this shortcut will display the value from the `/PROFILE` parameter in the title bar (for example, `clientAS1`).

Multiple Sessions
Using multiple sessions

5 **Extraction Configuration Wizard**

This chapter explains how to create a configuration file for extracting data from a data source with the Extraction Configuration Wizard.

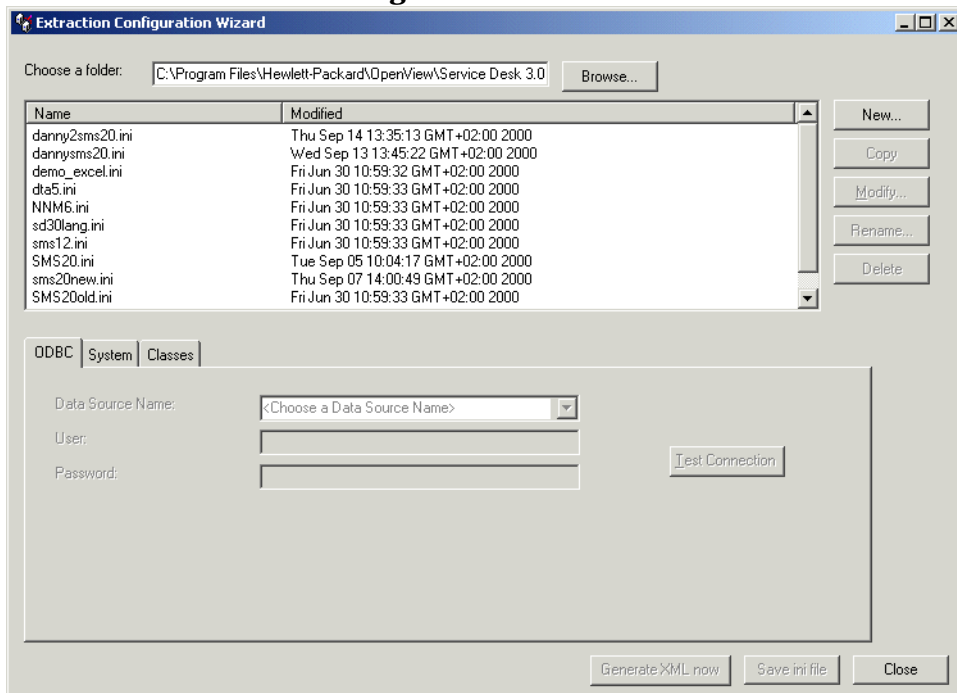
Introduction

An export configuration file is needed to extract data from an external data source. The extraction configuration wizard assists you in creating and maintaining an export configuration file without having a deep understanding of SQL, or possessing coding skills. You can select one from the list, copy and modify one from the list or create a new configuration file. To start the wizard:

1. Select Programs from the Start menu.
2. In the Programs submenu choose HP OpenView Service Desk 3.0.
3. Choose the Extraction Configuration Wizard option.

The main dialog box shows all configuration files currently available and includes three tabbed pages that mirror the structure of the extractor file:

Figure 5-1 Extraction Configuration Wizard



These tabs are available when you click New, or select an existing ini file.

- ODBC tab: Use this tab to define the ODBC connection with the external database. This is the DSN section in the configuration file:
- System tab: Use this tab to define the system and data file settings.
- Classes tab: Use this tab to define the items that will be exported. You can perform the following tasks using the Extraction Configuration Wizard started from the Classes tab:
 - Select source tables
 - Select columns
 - Enter the parent relation
 - Join tables
 - Filter data
 - Sort data
 - Enter settings for loading classes
 - Name and block a class

There are two ways to store the configured file:

- Generate XML now button: Use this button to save the ini file and generate XML code if you need to check the XML code before processing. An XML file name must be entered in the configuration file to perform this step.
- Save ini file button: Use this button to save your settings as an ini file. This step can be performed at any time during the configuration of the ini file.

NOTE

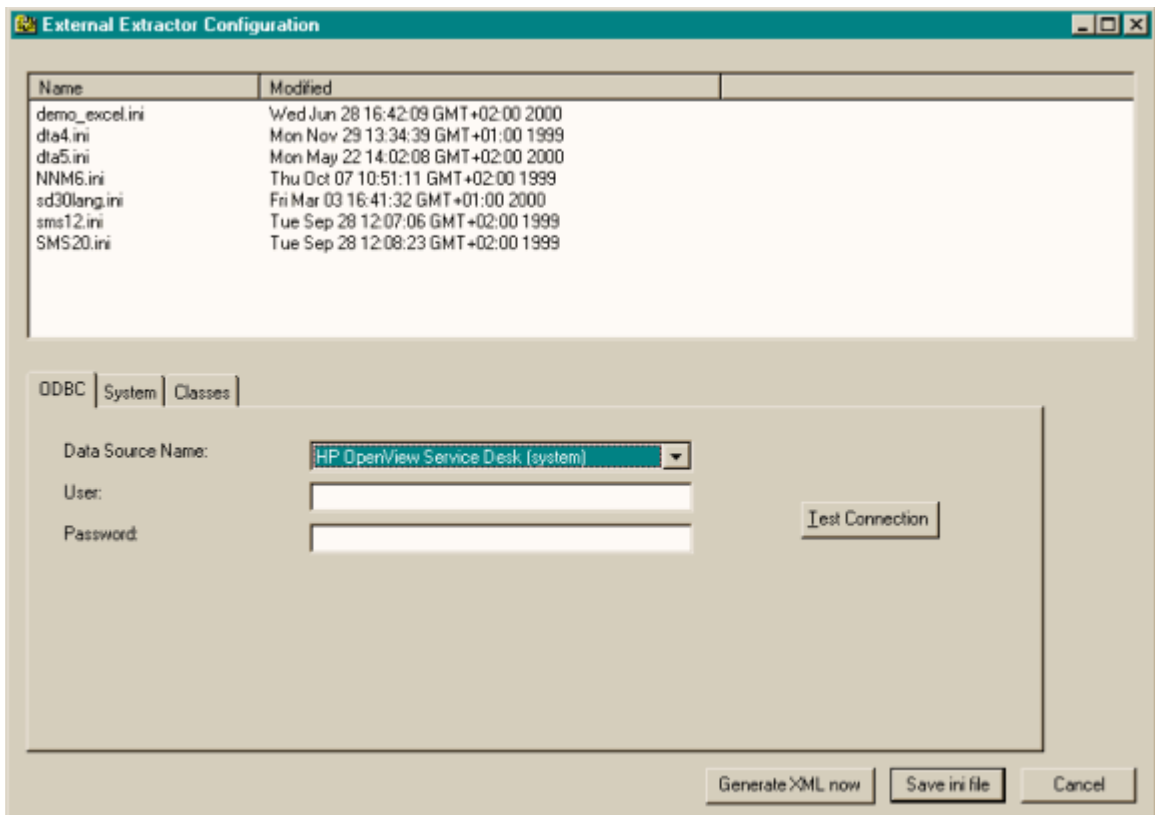
It is possible to maintain configuration files with a text editor, without using the wizard. A text editor allows more flexibility for users familiar with SQL, and the coding of configurable ini files. Additional information on this subject is available in the *HP OpenView Service Desk: Data Exchange Administrator's Guide*.

Defining the ODBC Connection

The ODBC tab is used to define the DSN section of the export configuration file. Fill in the tabbed page as follows:

1. In the Data Source Name field, select the name of the external ODBC data Source from the drop-down list:

Figure 5-2 ODBC Tab



2. In the User field, enter the name of the database user who owns the data source tables and views you intend to select, or have selected from the classes tab.
3. In the Password field, enter the password for the user.

4. If you are unsure, click `Test Connection` to verify that the ODBC connection is valid.

NOTE

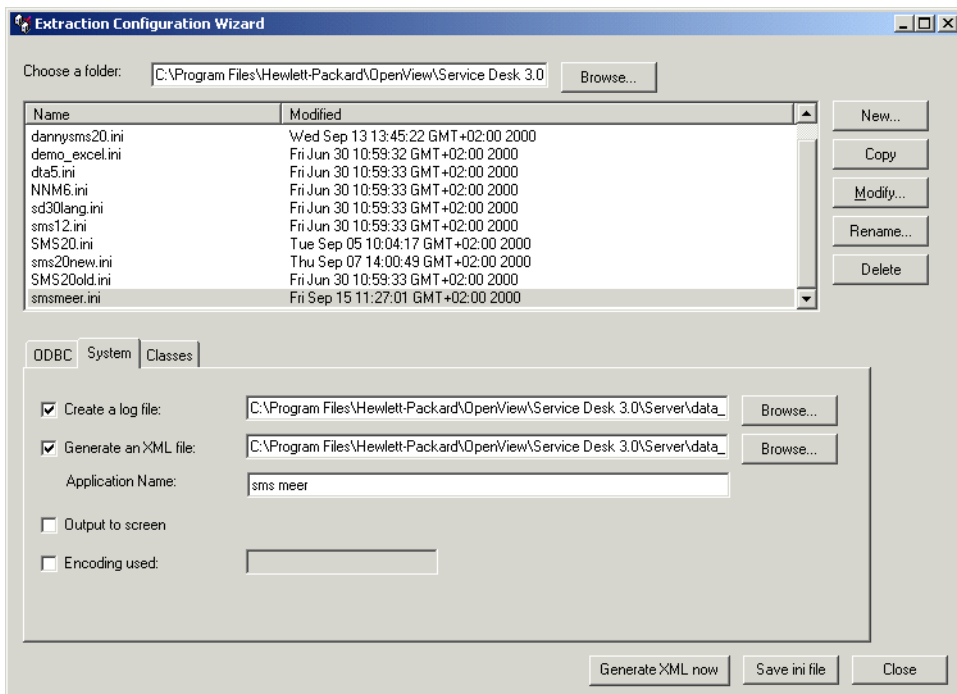
If you have not already done so, you will need to setup an ODBC link for this connection to work. You can enter the necessary information to create an ODBC link by going to the `Start` menu on your desktop, then click `Settings` and then the ODBC icon.

Defining the System Section

The System tab is used to define the output files you want created during the export process:

1. Select the Create a log file check box and browse for the location where you want the log file created:

Figure 5-3 System Tab



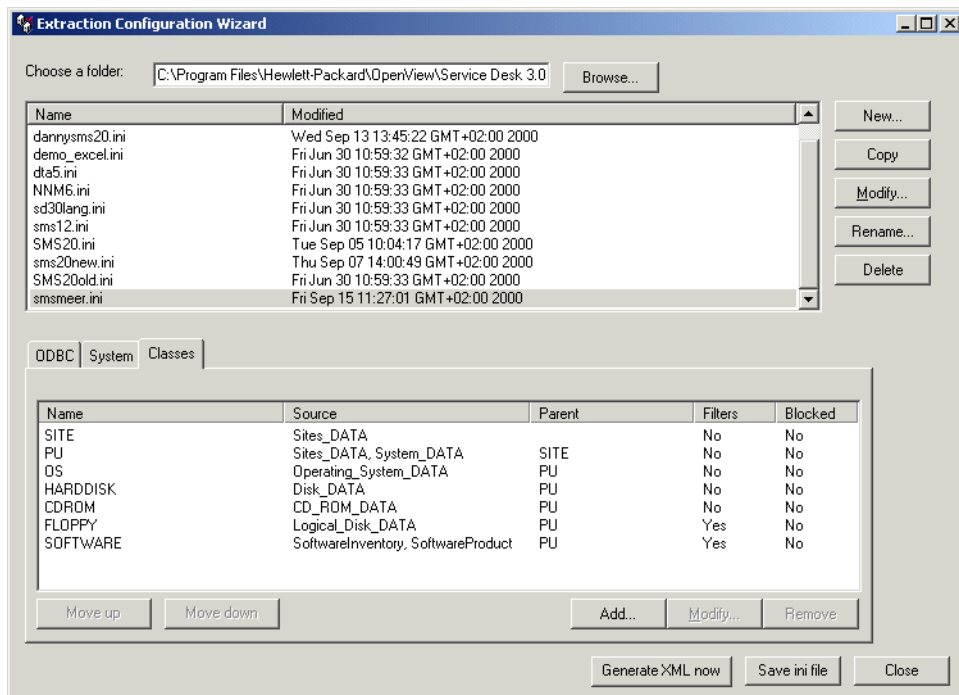
2. Select the generate XML check box if you want to create an XML file. If you want to import the file into Service Desk, you must select this option. Use the Browse button to select a file location.
3. In the Application name field, enter the name of the external application you are extracting data from.
4. Select Output to screen to view any extraction errors on your screen as the extraction process runs.

5. The extraction process uses ISO-8859-1 encoding as a default. If you want to use a different code, select the Encoding used check box and enter the code that will be used instead, for example UTF8.

Classes

The Classes tab is the starting point for defining the classes that you want to export. In the classes tab you will see the names of any classes currently in the configuration file, the table and alias source, the parent for the class, if a filter is applied or if the class is blocked:

Figure 5-4 **Classes Tab**



- Use the Move up and Move down button to rearrange the classes in the order that the data should be extracted:
- Click Add to add a class to the configuration file.
- To modify an existing class, select the class and click the Modify button on the classes tab.
- If you click Add or Modify, a wizard page will open for selecting source tables.

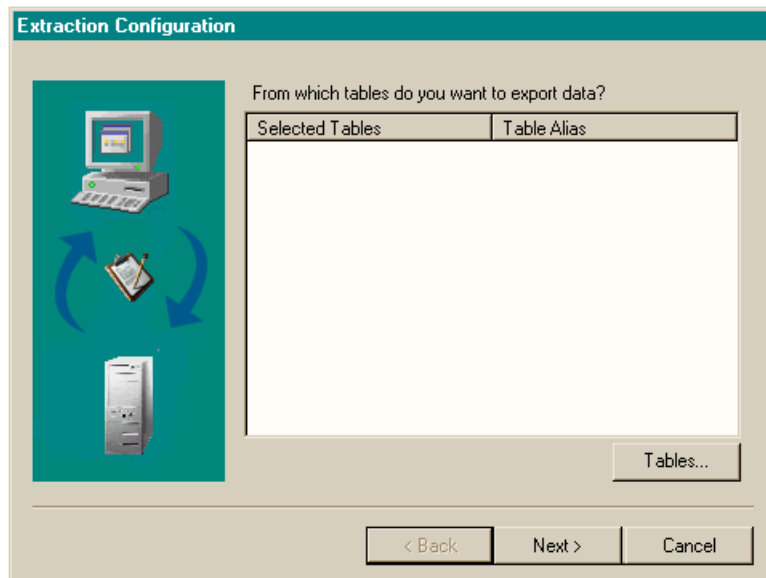
Select Source Tables

If you are modifying a configuration file, a list of all currently selected tables and their aliases is displayed. When you create a new file this screen will be blank.

To add or remove tables:

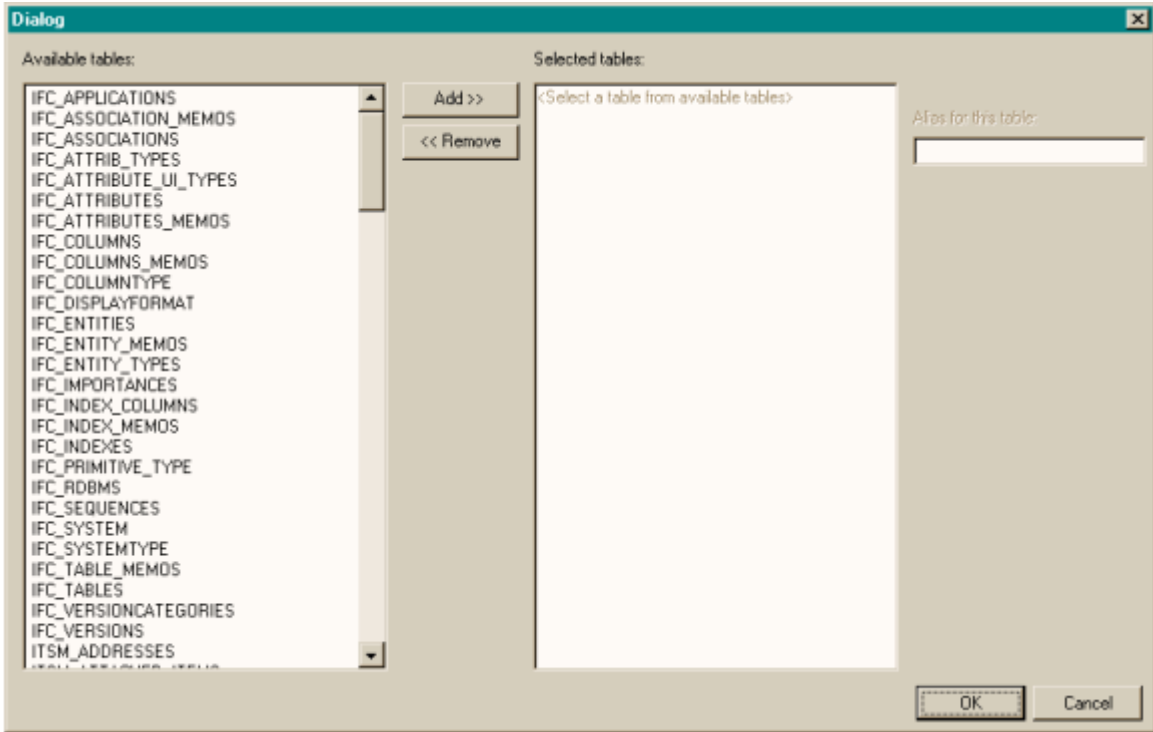
1. Click the Source button:

Figure 5-5 Currently Selected Source Tables



2. In the dialog box that appears, select one of the available tables from the list and click Add to select it. When it is moved to the Selected tables list you will be able to view the alias for the selected table. You can add, change, or delete the alias name in the Alias for this table field, but it must be unique:

Figure 5-6 **Selecting Source Tables**

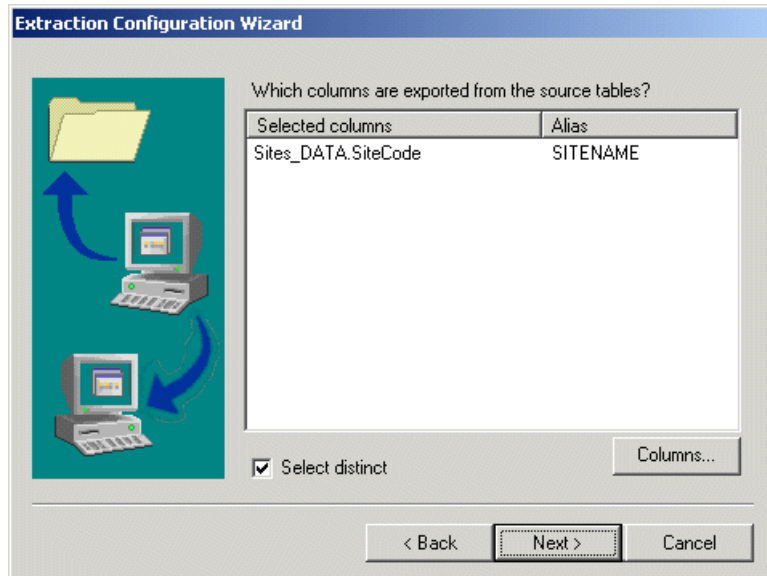


3. Select a table from the Selected tables list and click Remove to remove it. Once a table is removed the alias name is no longer displayed.
4. Use the Describe button to view the columns of a selected table, the Describe pop-up will show the type and values of the columns for the table.
5. Use the Show Value button to view the column values of a selected table.
6. Click OK to return to the Extraction Configuration Wizard, Currently Selected Source Tables wizard page, and Next to continue.

Select Source Columns

A wizard page appears showing the columns currently selected to be exported from the source tables:

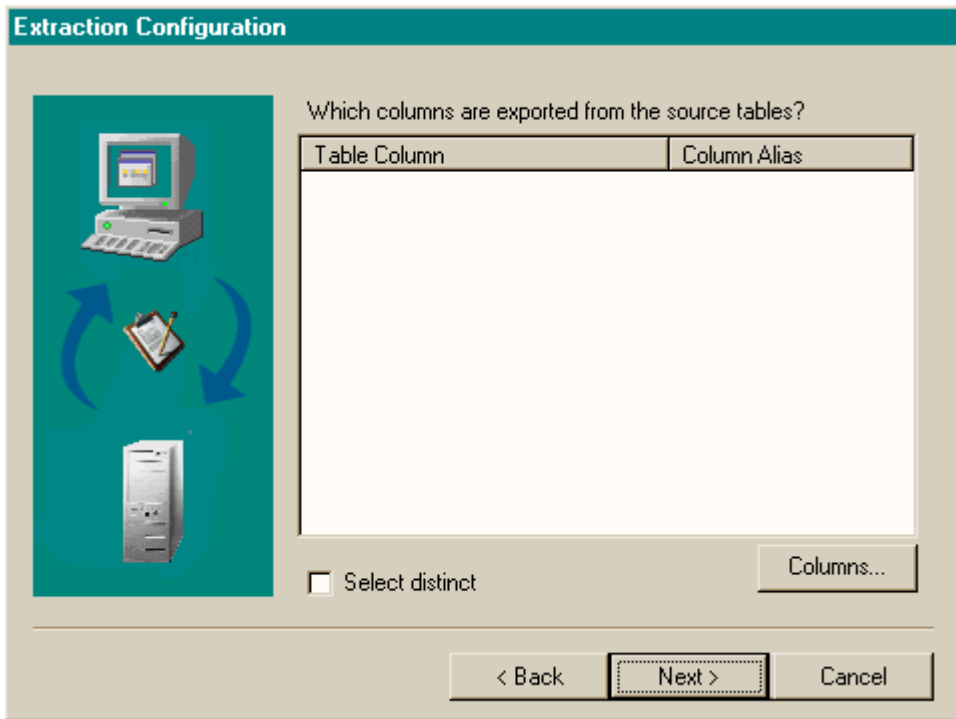
Figure 5-7 **Currently Selected Table Columns**



To select additional data source columns:

1. Click the **Columns** button to open the table column dialog box where you can add, or remove columns. All the columns of the previously selected tables are available:

Figure 5-8 **Select Table Columns**



2. Choose a table from the `Source` drop-down list. The columns of the selected table are listed on the left-hand side of the screen. Select a column from the sources list and click `Add` to move it into the selected list or `Remove` to remove items from the selected column list.
3. Each column can have an alias. To add an alias for a column, select the column and enter a name in the `Alias` field. The alias name you create must be unique.
4. The `Free Text` button enables you to enter SQL code to adjust column values. To use `Free Text` to enter SQL code:
 - a. Click `New Field`. This creates an entry in the `Selected columns` field.
 - b. Select the new entry, and click the `Free text` button. The `Free text` dialog box is displayed.
 - c. In the `Free text` dialog box, enter the required SQL code and field names in the `Enter free text for this column field`.

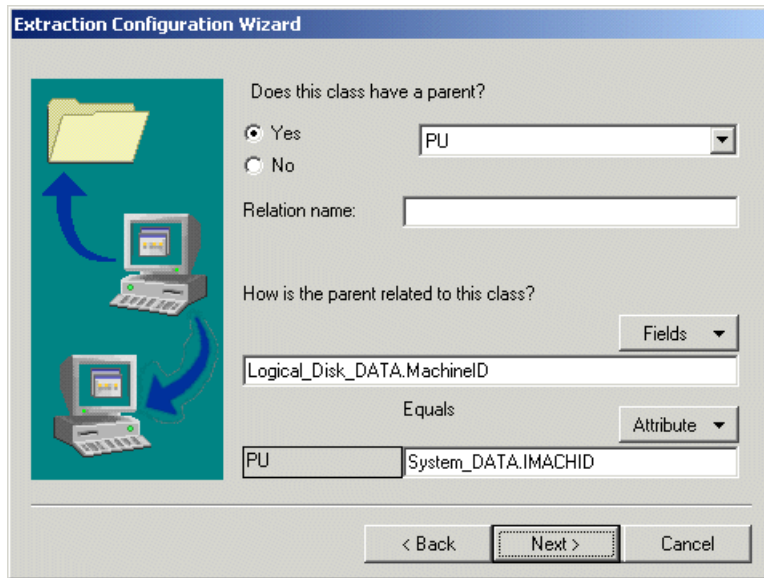
- d. The Fields button enables you to choose fields from the selected columns to be inserted at the position of the cursor in the Free text field.
 - e. The Show Column Results button lists the resulting values produced by the SQL statement in a pop-up dialog box.
 - f. Click OK to return to the Select table columns dialog box.
5. Use the Show Value button to view the real values of the selected columns.
 6. Use the Block this column check box to block the currently selected column. You may want to do this, for example, when a column is in a parent relation but you do not want to extract the data. When a column is blocked, it will not be listed behind ATT=.
 7. Click OK to return to the Extraction Configuration Wizard, Select Source Columns wizard page.
 8. Choose the Select distinct check box to ensure that duplicate columns are not extracted.
 9. Click Next to continue.

Enter the Parent Relation

One parent class can be entered for each class. To enter a parent for the class:

1. Select the Yes option in answer to the question "Does this class have a parent?". The default is No, if you do not want to create a parent relation leave the setting as No and click Next:

Figure 5-9 Enter Parent Relation



2. Select the class name of the parent in the field on the right from the drop-down list of all previously entered class names.
3. The Relation name is optional.
4. Click **Fields** to open a list that includes all tables previously selected for this class. The list will include all columns available for the selected tables. Select one of the columns from the list.
5. Click the **Attribute** button to open a list of previously selected tables for the parent class. The list will include alias names or columns available for the selected tables. Select the appropriate column. This information is entered after the **ATT** line of the parent in the configurable ini file.
6. Click **Next** to Continue.

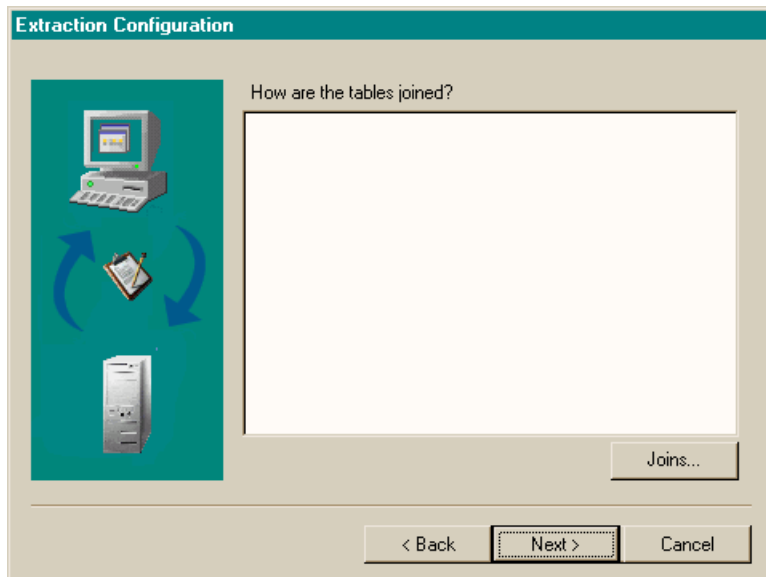
Join Tables

Tables can be joined to help link information in columns. For example, you may want to link information from one column to a code table definition listed in another column.

In this dialog box you can see all joined tables for this class:

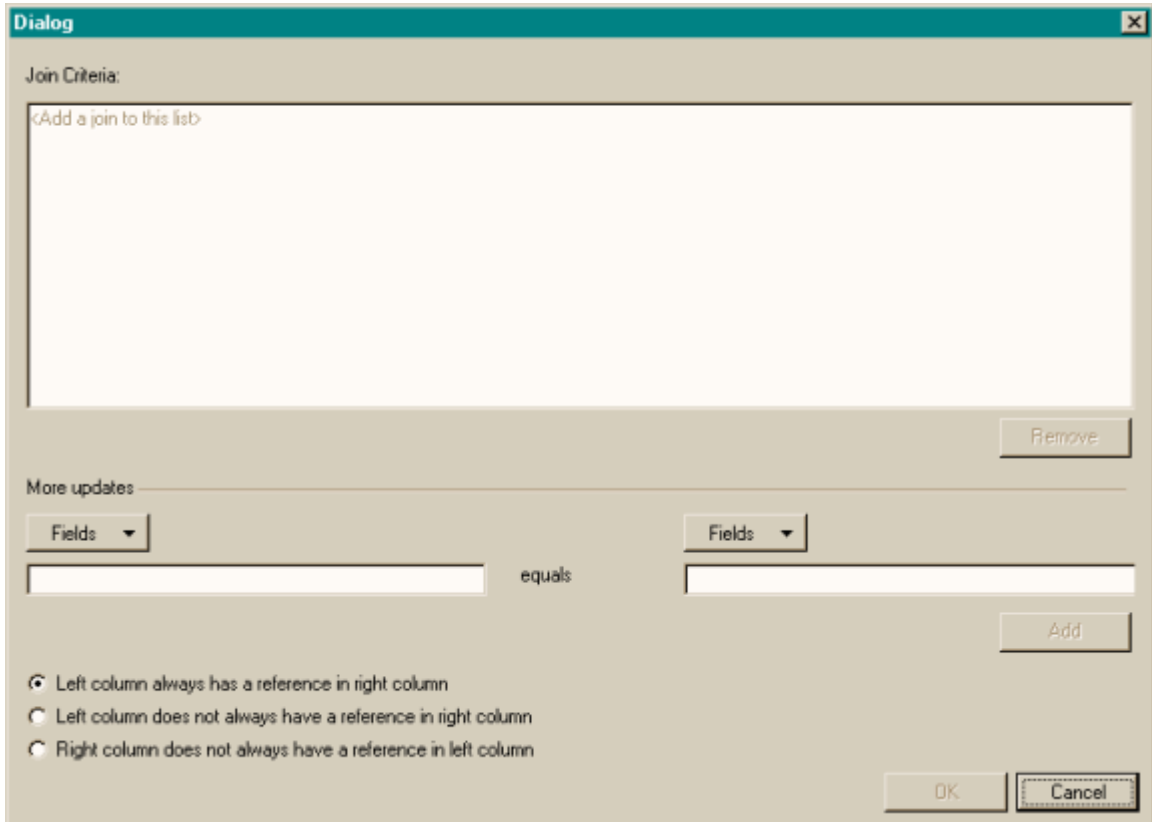
1. Click **Joins** to define the conditions for joining tables:

Figure 5-10 **Joined Tables**



2. To add a new joining condition, click the **Fields** button on the left portion of the dialog box. A list of all selected tables and all columns available for those tables will be visible:

Figure 5-11 Add a Joining Condition



3. Select the table and column.
4. Click **Fields** on the right portion of the dialog box. A list of all selected tables and all columns available for those tables will be visible. Select the column you want to join with the one selected in step 2.
5. Click **Add** to add the joining condition to the list.

NOTE

The syntax used by the wizard for a join is a comma (.). When a join is created by the above method this syntax is automatically used, however if you are modifying an existing ini file any existing joins that use LEFT JOIN, JOIN, or RIGHT JOIN will not be displayed in the wizard. You must replace these joins manually using a text editor,

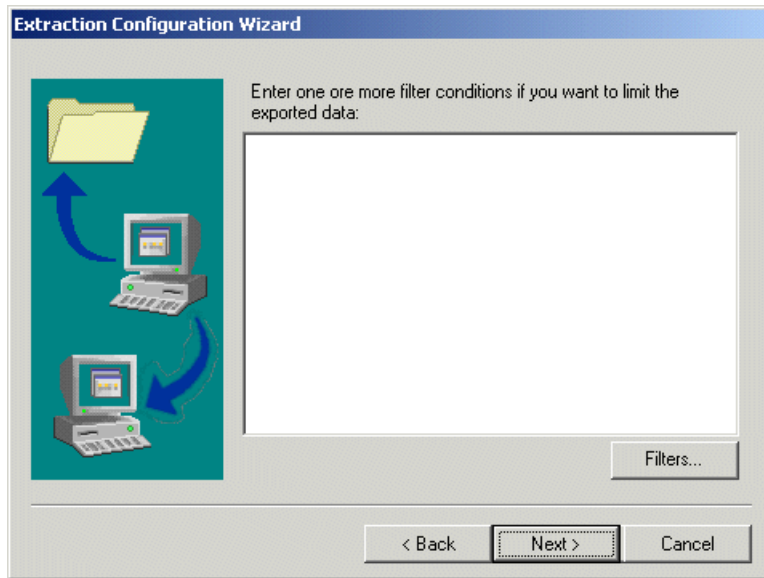
before they can be displayed.

6. The following options are only available for Oracle® database users. Select one of the following options:
 - Left column always has a reference in right column, this refers to an outer join.
 - Left column does not always have a reference in right column, this refers to a left outer join. The left column may be Null.
 - Right column does not always have a reference in left column, this refers to a right outer join. The right column may be Null.
7. Click **OK** to return to the Extraction Configuration Wizard, Join Tables wizard page.
8. Click **Next** to continue.

Filter Data

Filters can be defined for each class being exported. Each filter can then be blocked or activated from a subsequent Filter conditions dialog box.

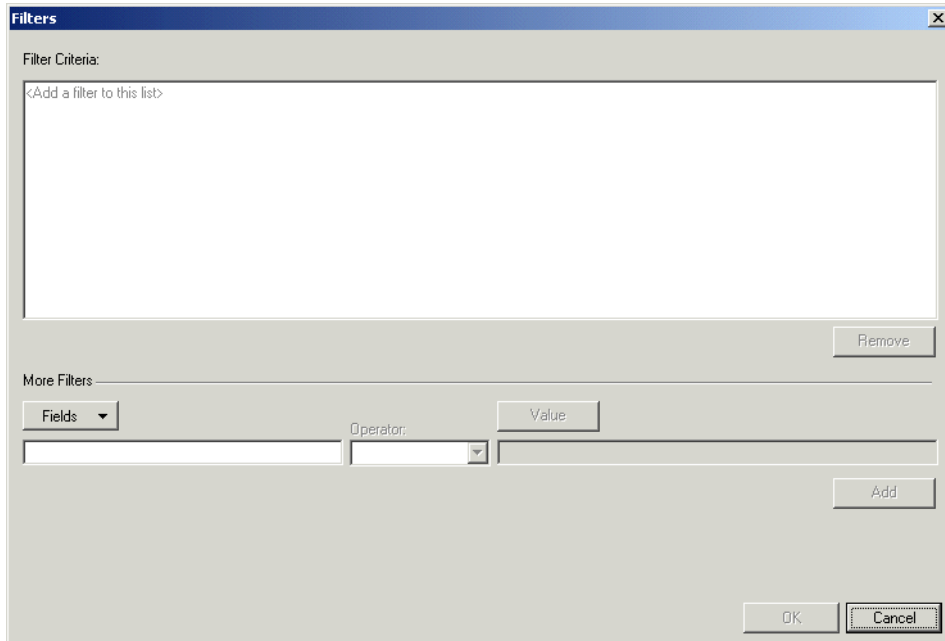
Figure 5-12 **Filter Data**



To create a new filter definition:

1. Click the Filter button to open the Filter conditions dialog box:

Figure 5-13 Add a Filter Condition

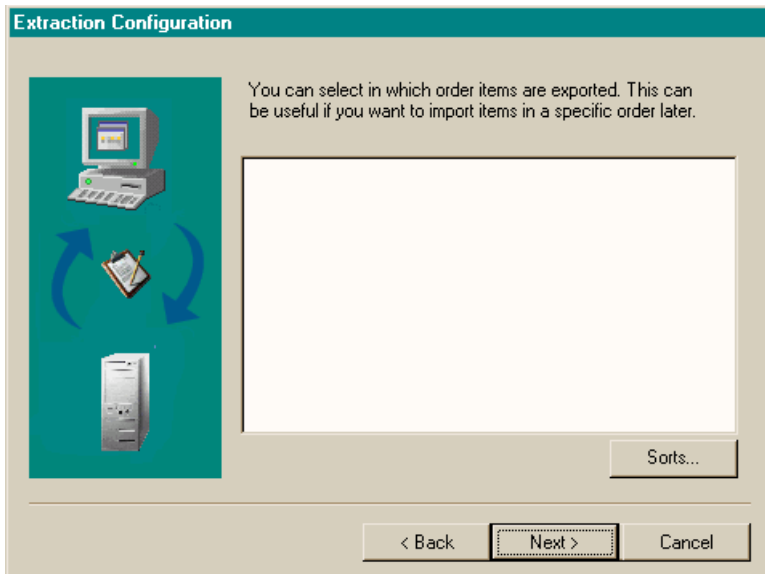


2. Click **Fields** to select the table and column that you want to apply the filter to.
3. In the **Operator** field, use the drop-down list to select an operator. The Operators available vary depending on the field type, as different operators are needed for text, numbers, or dates. The operator selected may also affect what you do with the **Value** field. For example, if the field type is numerical and the **Between** operator is chosen, two value fields are displayed. First place the cursor in one field, click **Value** and select a value from the list, place the cursor in the other field and repeat the action. For a different field type the **Is In** operator will show a list of check boxes you can select.
4. Click **Value** to select the value range.
5. Click **Add** when you are finished with the definition. You can add multiple filter definitions for each table column selected.
6. Click **OK** to return to the Extraction Configuration Wizard, Filter Data wizard page.
7. Click **Next** to continue.

Data Sort Order

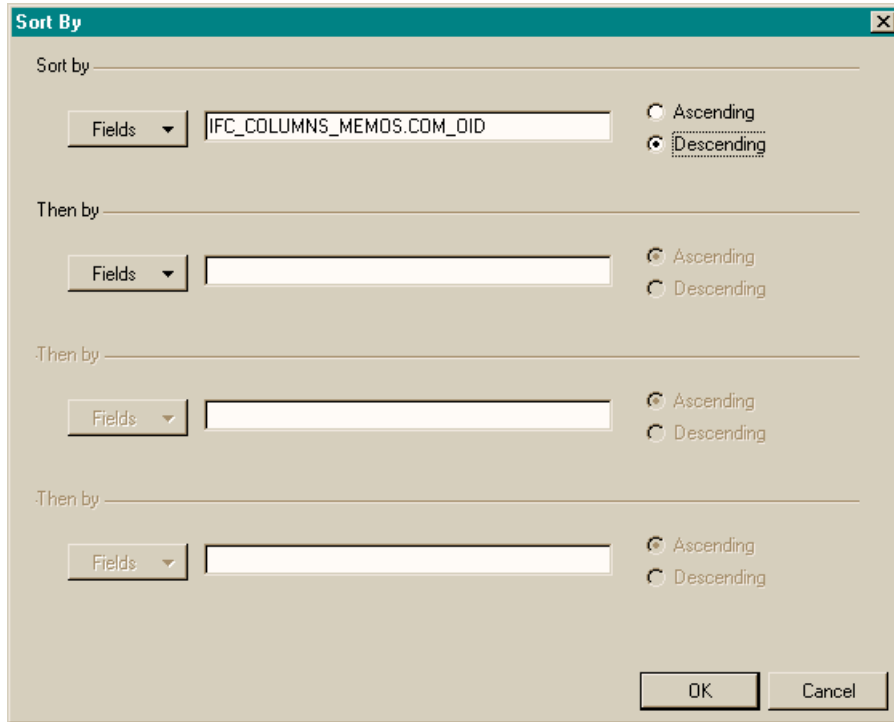
Use this wizard page to select the order in which data is exported. This can be an important step if the data being exported needs to be imported in a specific order. This screen initially shows sort order currently defined in the database, to change it:

Figure 5-14 **Current Sort Order**



1. Click **Sort** by to open another dialog box where you can establish the sort order:

Figure 5-15 **Sorting Data**



2. Click **Fields** to view a list of all tables and columns previously selected. You can enter a maximum of four table columns per class.
3. Click on the table column you want to sort by to enter it in the field.
4. Select the **Ascending** or **Descending** option for each table column entered.
5. Click **OK** to return to the Extraction Configuration Wizard, Current Sort Order wizard page.
6. Click **Next** to continue.

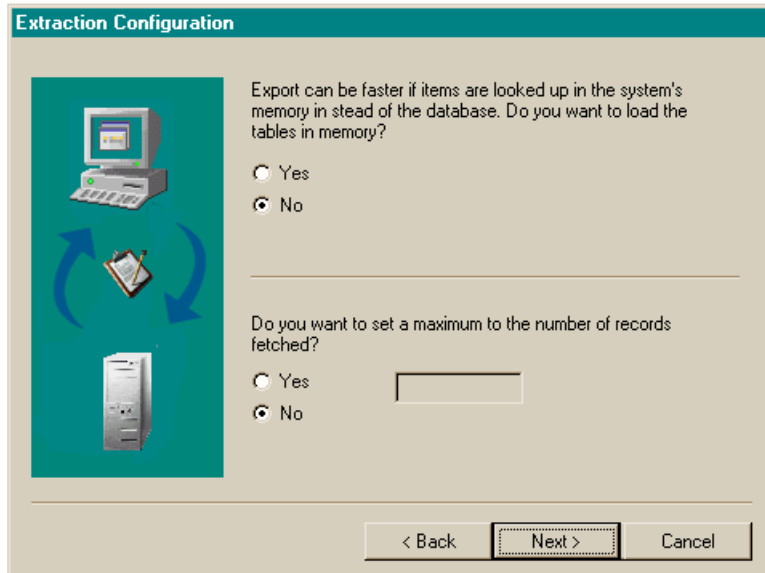
Enter Settings for Loading Classes

Use this option to achieve a faster extraction rate.

- If you select the **Yes** option, tables will only be loaded in the system memory and not in the database when exported. This will speed up

the processing time. You can select this option for each class.

Figure 5-16 Enter Settings for Loading Classes



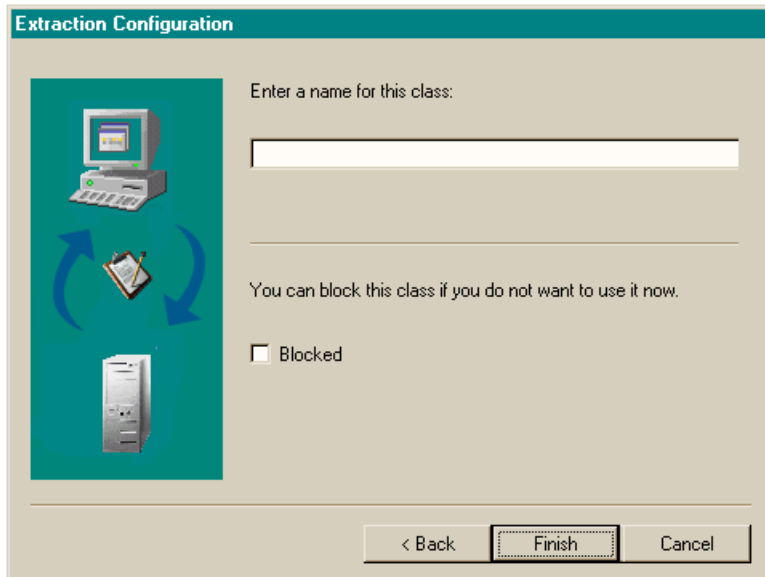
- To set a maximum number of records fetched, select the Yes option in the lower half of the dialog box and then type in the number of records. This will limit the number of records extracted from the database to the number entered.
- Click Next to continue.

Name and Block a Class

Use this wizard page to give a name to the settings you have just defined. This name will be displayed in the classes of the wizards main screen.

1. Enter a Name for this class, do not use spaces in the name. This name will appear as the class name in the exported XML file. If you configure the import mapping in Data Exchange you will map this name from the XML file to the correct item in Service Desk:

Figure 5-17 Name and Block a Class



2. Select the Blocked check box if you do not want to export the class. You can change this option for each class as often as necessary.
3. Click Finish to save all of your settings to a temporary table and return to the Classes tab page.

NOTE

The setting defined above will not be saved to the ini file until you click Save ini file on the main Extraction Configuration Wizard page, see “Introduction” on page 64.

Error Messages

During the process of configuring an ini file the following error messages may be generated. These problems are most likely to occur when you are modifying a previously configured file.

NOTE

The use of upper case and lower case must be consistent within an ini file (for example a table can't be named Sites_DATA in one place and Sites_Data in another). Although this does not produce an error message itself it may be the cause of other messages.

Possible Errors While Reading the ini File

Cannot find parent '<parent_name>'.
The class that is mentioned as parent does not exist.

Cannot read from file '<file_name>'.
The file is not readable.

Class '<class_name>' cannot have itself as parent.
A class cannot have itself as parent defined.

Connection to <dsn_name> as <user_name>/<password> failed.
Connection to the external source using the settings in the DSN section failed.

Misplaced brackets in line '<line>'
The order or number of brackets [] in the line is not correct.

No '=' in parent relation.
No equal sign can be found in the parent relation.

No operator found in condition '<condition>'.
The condition does not have an operator.

No references to tables found in condition '<condition>'.
There must be 1 (filter) or 2 (join) references to tables or columns in the condition. The table name and column name, or column name only, defined in a filter or join must be found in the database.

No table and column found in ordering '<ordering>'.
The ordering should refer to a table and column. The table name and

column name, or column name only, defined in a filter or join must be found in the database.

Parsing stopped.

Parsing has been stopped due to previous errors.

Unknown columnname '<column_name>' in parent relation.

The parent's column mentioned in the parent relation is unknown.

Unknown tablename '<table_name>' in parent relation.

The source table mentioned in the parent relation is unknown.

Wrong number of values in condition '<condition>'.

The number of values does not match the operator in the condition.

Possible Errors While Writing the ini File

Cannot write to file '<file_name>'.

The file is not writable.

Extraction Configuration Wizard
Error Messages

6 Approval

This chapter describes the Approval feature in HP OpenView Service Desk. The information provided in this chapter will optimize the approval process within your IT services.

Approval

The topics covered include:

- Introduction to Approval
- Enabling Approval Sheets
- Creating Approval Sheets
- Activating Approval Sheets
- Monitoring Approval Sheets
- Voting on Approval Sheets

Introduction

The delivery of business-critical IT services depends on prompt decision making. Steps within the IT management process may need to be authorized to provide agreed-upon service levels. Ensuring that the appropriate specialists are involved in decision making before implementation is crucial to productivity. When authorizing IT management processes, it is counter-productive and time-consuming to manually track issues requiring action.

Service Desk Approval provides a structured, process-oriented mechanism that supplies an effective method of managing and authorizing IT management processes.

The following processes are supported by Approval:

- Help Desk Management
- Incident Management
- Problem Management
- Change Management
- Configuration Management
- Project Management

Overview of Approval

Approval provides the ability to automatically request authorization for issues requiring action. For example, a change to your network is required. How can the appropriate specialists authorize this change in a timely manner? Approval ensures that agreements to proposed actions are secured automatically in line with your company's strategy.

When an action requires an approval, an approval sheet must be completed. The status of the approval sheet is initially Inactive. In this stage, the approval sheet indicates a deadline date for a response and the specialists who should authorize the action.

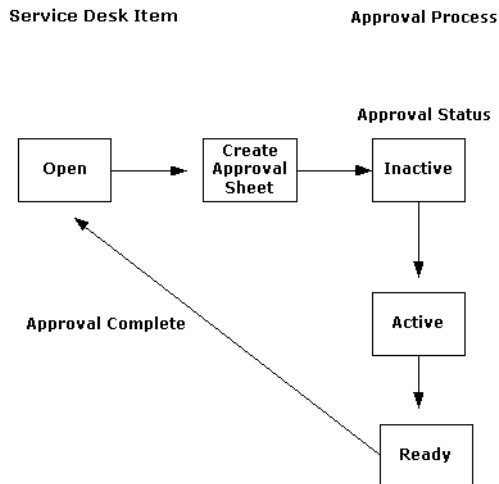
The status of the approval sheet should be changed from Inactive to Active to begin the approval process.

An active approval sheet automatically notifies the approvers within

Service Desk in the Service Today view. The approvers then vote by selecting Yes or No. The results are automatically tabulated and, when enough predetermined approvers have authorized the action, the approval status automatically changes to ready. The approval result reflects that the approval task has been completed and, if approved, implementation can begin.

If approvers have not entered a vote at the end of the predetermined approval period, the approval sheet status automatically changes to Ready. The approval result, however, is Rejected.

Figure 6-1 **Approval Process**



Approval Sheets

Approval Sheets can be added to any form within Service Desk. When opening a form, a tab for the Approval Sheet is enabled. The initiator of the approval process as well as the designated approvers will be able to view the approval sheet.

The approval sheet serves dual purposes: as a ballot for the designated approvers as well as a means to start the approval process.

Figure 6-2 Approval Sheet

3 - Change Form With Approval Sheet

File Edit View Tools Actions Help

Save and Close Default template

Due today.

ID: 3

Status: To be approved

Configur... DASFASDF

Description: new monitor

Information: The monitor does not meet the user's requirements

Category:

Desired Solution: purchase and installation of new monitor

Project:

Requestor:

Initiator: Charles Jones

General Approval Sheet Work orders Relations Time/Cost Predecessor

Approval Status: Inactive

Deadline: 9/20/2000 14:48

#Approvers Req: 2

Strategy: 2 Out of 2

Approval... Hewlett Packard Approval Team

Approval Votes: Preview

Approver	Approver Organization	Approved
Charles Jones	Hewlett Packard	
John Smith	Hewlett Packard	

Add... Modify... Remove

Result: Incomplete

The Approval Sheet consists of the following fields:

- Approval Status

The approval status can be set to Inactive, Active or Ready.

- Deadline

This is the last date that a vote on an approval sheet can be received.

- #Approvers Req

The number of accepted votes required by the designated specialists before the process is approved.

- Strategy

The strategy describes how many approvals are required out of the

total pool of specialists that were asked to vote. For example, if 10 specialists were asked to approve an action, if your company strategy is that only one of the specialists must approve the process, then the strategy would be 1 out of 10.

- **Approval**

This field reflects the approval group that would authorize an action. This group can be an organization or several specialists within the same department.

- **Approval Votes**

Information regarding the specialists voting on actions can be previewed here. The preview contains the approver's name and vote. If the specialist has rejected the action, a reason will be displayed.

- **Result**

This field reflects the results of the voting.

Approval Roles

The responsibilities of your specialists are based on their areas of expertise. To best utilize their knowledge, as well as strengthen your help desk performance, several crucial roles must be identified. The approval roles will assist in developing effective implementation of Service Desk Approval.

To implement the Approval feature, you should identify staff for the following roles within your organization:

1. **Approval initiator**

An action requiring approval must be identified. This process is completed by specialists, help desk employees, change managers, problem managers, or anyone authorized within your organization.

2. **Approval activator**

Changing the status of an approval sheet from Inactive to Active is crucial to beginning the approval process. An approval activator can be the approval initiator or someone designated by your organization to review proposed approvals before beginning the approval process.

3. **Approver**

The specialist who is designated by the approval activator or approval

initiator need to vote on the approval sheets. The specialists are notified automatically of issues requiring their vote. Approvers can be individual specialists or part of a defined group.

4. Approval monitor

To ensure that decisions are made in a timely manner, a role such as a change manager may be designated to monitor approval sheet statuses. If an approval sheet has not been voted upon before the deadline, the approval watcher can be designated for final authorization.

Approval Status

Inactive

When the status is set to Inactive, the approval group or approver(s) can be designated on an action. The approvers, however, are not notified until the status is set to Active.

Active

The approval process begins if the status is set to Active. Setting an approval status to Active can be completed manually.

Ready

When an Approval Sheet has been approved or rejected, the status changes to Ready. The requested action is authorized for implementation.

Approval Result

Approved

If the required number of approvals are received, the result will indicate Approved.

Rejected

If the required number of approvals are not received by the deadline date or the approvers have rejected a request, the result will indicate Rejected.

Incomplete

If further information is required before the approval process can begin, the result is incomplete.

Enabling the Approval Sheet

To effectively use the Approval feature, you must have a clear understanding of forms usage in Service Desk. In addition, you need system administrator rights. For additional information, refer to *Service Desk Online Help, Forms*.

An Approval Sheet can be added to the following forms within Service Desk:

- Change
- Project
- Work order
- Service call
- Incident
- Problem

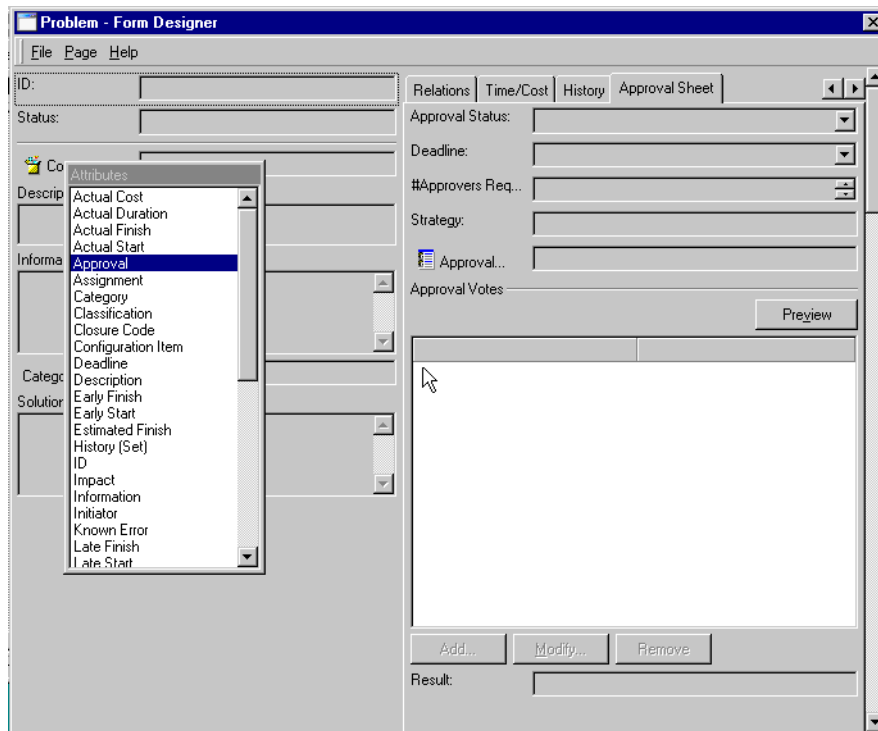
Adding Approval Sheets to Forms

Form settings must include an Approval tab page to implement the Approval feature. For example, you may wish to add an Approval Sheet tab page to the Problem or Incident forms. Follow the steps below to set up or modify forms which do not have Approval Sheets as a standard feature:

1. From the **Tools** menu, click **System**, then double-click the **Presentation** icon in the **Administrator Console**.
2. Click the **Forms** icon in the **Navigation pane**.
3. Select the form you want to add an Approval Sheet to, for example **Problem**.
4. Choose **New Page** from the **Page** menu.
5. Type **Approval Sheet** in the **Name** field.
6. Click **OK**.
7. Select **Approval** from the **Attribute** list.
8. Drag and drop the **Approval** element from the **Attributes** list onto

- the Approval Sheet.
9. Drag and drop the `Initiator` element, if required, from the `Attributes` list onto the Approval Sheet.
- To begin an Approval process, an initiator's name must be indicated.
10. Choose `Save` from the `File` menu.
 11. Close the `Administrator` console.

Figure 6-3 Adding an Approval Sheet to a Form



Creating Approval Sheets

The first step in the Approval process is the completion of an approval sheet.

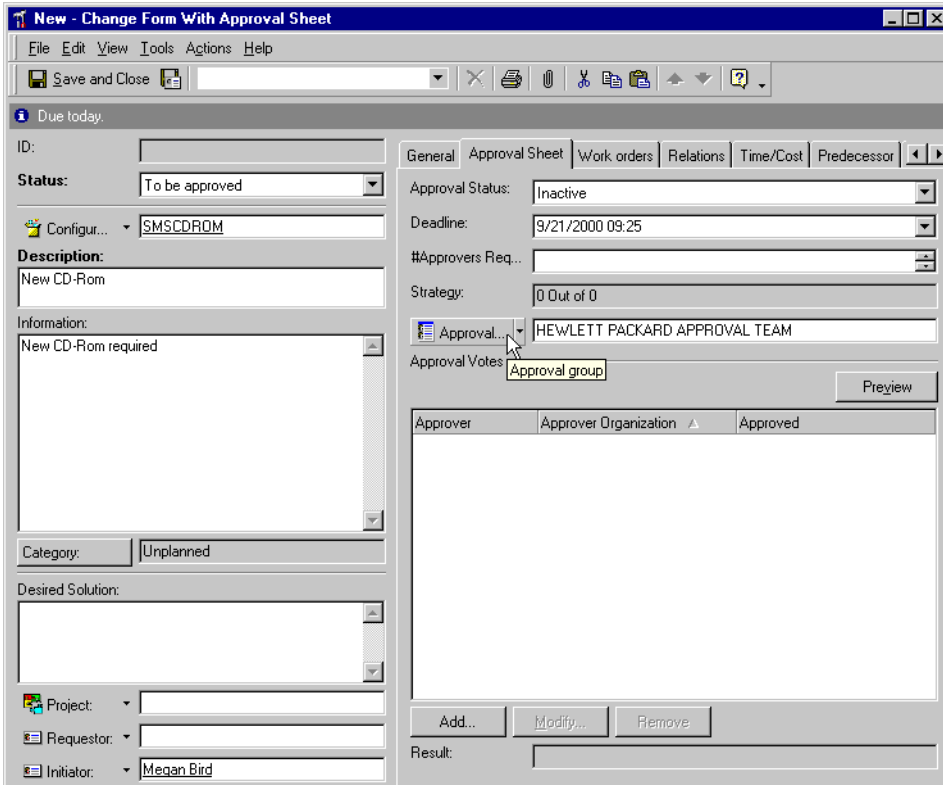
To create a task for Approval within a form:

1. Click the `Approval Sheet` tab.
2. Enter the initiator's name in the `Initiator` field.
3. Click the `Deadline` field and enter a date.

The deadline date is crucial in the Approval process. If the approvers have not voted on the Approval Sheet by this date, the request will automatically time out. The Approval Sheet will then be rejected.

4. Enter the name of an approval group in the `Approval` field. The names of each member of the group or the name of the organization will appear in Approval Votes.

Figure 6-4 Entering an Approval Group



5. In the #Approvers Req field, click the arrow to indicate how many approvals are required. By clicking the up arrow, you will increase the number of required approvals. By clicking the down arrow, you will decrease the number of required approvals.
6. Click Save and Close.

NOTE

The approval status must be set to Active to be enabled.

NOTE

The initiator of the approval request as specified in the `Initiator` field is the only person authorized to complete the deadline and list of approvers.

Adding Approvers Outside of an Approval Group

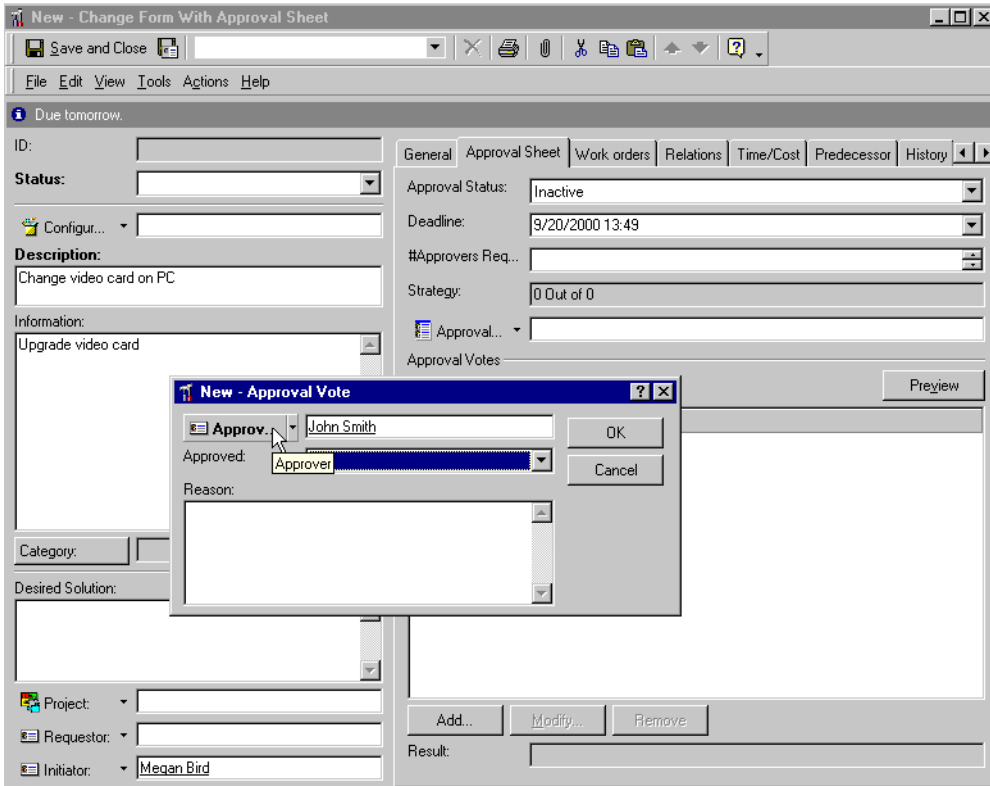
If the specialists you wish to vote on an approval sheet are not members of a group, use the following method:

Approvers can be designated from approval groups or individually.

To add approvers:

1. Select the Approval Sheet.
2. Click the `Deadline` field and enter a date.
3. In `Approval Votes`, right-click your mouse button and select `New Approval Vote`.
4. Enter the approver's name.

Figure 6-5 Adding an Approver



5. Click OK.
6. In the #Approvers Req field, click the arrow to indicate how many approvals are required, if necessary. By clicking the up arrow, you will increase the number of approvals required by one.

Modifying Approvers

To modify approvers:

1. Highlight the Approver in Approval Votes.
2. Click Modify within the Approval Sheet, or double-click the approver's name.
3. Make the required changes within Approver.
4. Click OK.

NOTE

Once the approval status has been changed from Inactive to Active, you will be unable to modify approvers. Modify is replaced by View when the approval status is Active.

Removing Approvers

To remove approvers from the approval sheet:

1. Select the approver's name.
2. Click Remove.
3. Click Yes in the pop-up dialog box.

Activating Approval Sheets

The approval status is set to Inactive and must be manually changed to Active. When the approval status is Active, the approval process begins.

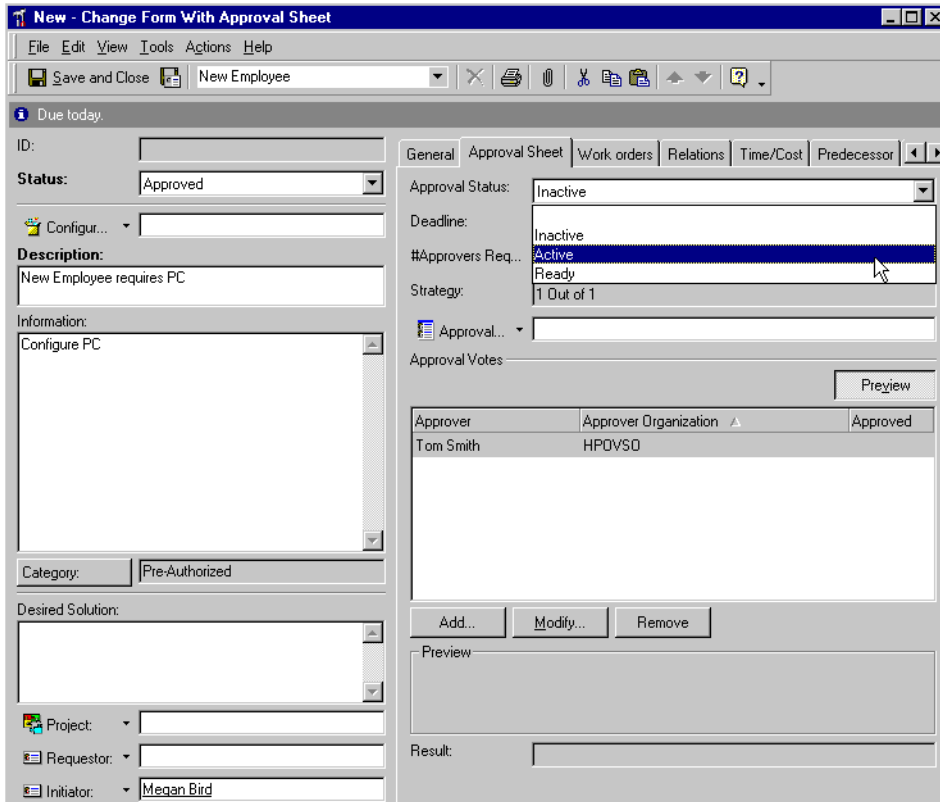
To change the status of an approval sheet:

1. Click the Approval Sheet tab.
2. In the Approval Status field, select Active.
3. Click Save and Close.

NOTE

When the approval status is Active, approval voting is enabled.

Figure 6-6 Approval Status Change



Monitoring Approval Sheets

A role, such as a change manager, should monitor approval sheets to ensure timely implementation. Approval Sheets, however, can be monitored by anyone within your help desk requiring status information.

To check the status of an approval:

1. Open the `Approval Sheet`.
2. Look at the `Result` field. This field will indicate the current status of the approval voting process on the `Approval Sheet`.
3. Highlight `Approver` in `Approval Votes`.
4. Click the `Preview` button.

Information is displayed on the approver, the approval vote and reason in the `Preview` pane. To view more specific information, click the `View` button.

Figure 6-7 Approval Vote Preview

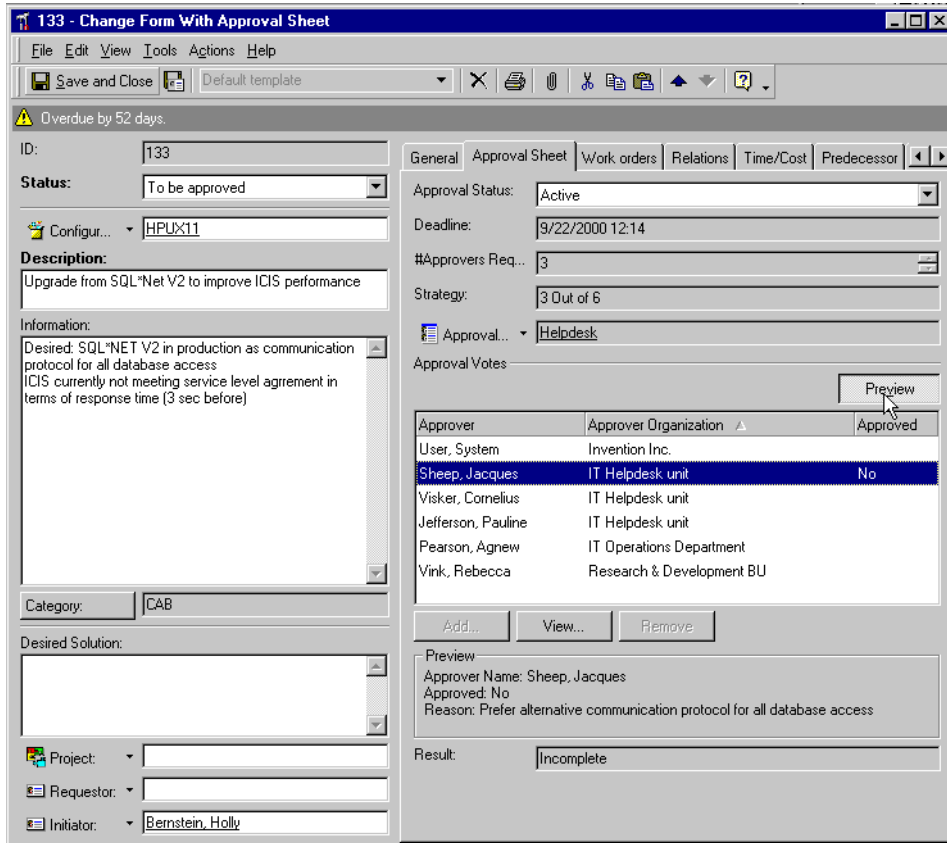
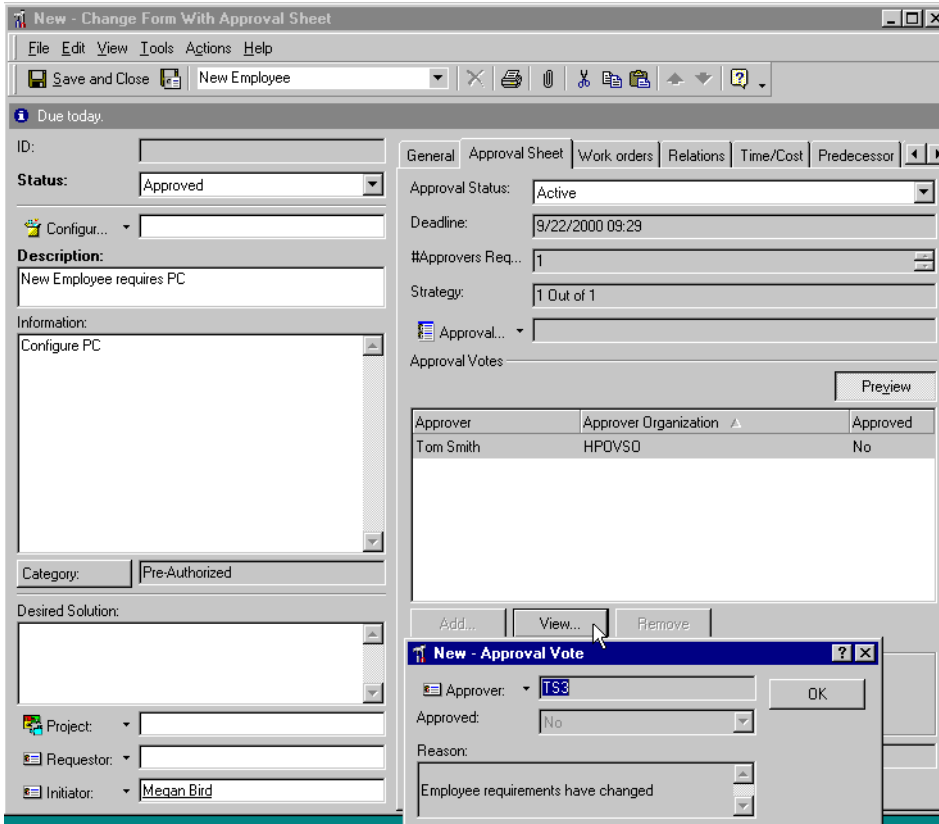


Figure 6-8 Approval Vote View



Voting on Approval Sheets

Once the Approval Sheet is active, specialists are able to access the Approval Vote field of an action requiring their vote. When you click the Modify button, the Approval Vote display box is enabled on the approval sheet.

NOTE

When the Approval Vote field is enabled on an action, note the deadline date on the approval sheet. You must approve or reject the request by the deadline date or you will lose your option to vote.

To vote on an Approval Sheet, within the Approval Vote box:

1. Click the arrow in the Approved field.
2. Select Yes or No. If you select No, type a response in the Reason field

Figure 6-9 Voting Yes on an Approval Sheet

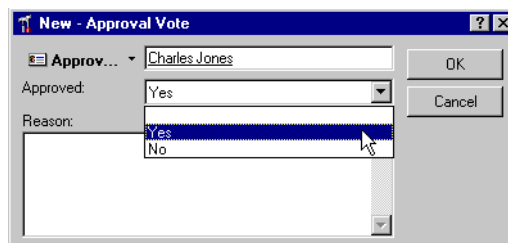
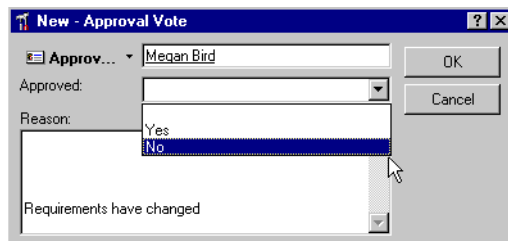


Figure 6-10 Voting No on an Approval Sheet



3. Click OK.

Approval Votes has now been updated to reflect your vote. If you have voted `Yes`, when the required number of approvals have been received, the `Result` field will indicate the Approval Sheet has been approved.

If you have voted `No`, The `Result` field may indicate that the Approval Sheet has been rejected (depending on the defined strategy).

NOTE

When rejecting an Approval, you must supply information in the `Reason` field.

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