

HP OpenView Service Desk 2.0/3.0

Database Sizing

First Edition



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1 Database Sizing

This document contains information to assist you in calculating the amount of database storage space needed to run Service Desk 3.0. Information is provided for both Oracle 8 and SQL Server 7.

Database Sizing

The figures provided were originally calculated for Service Desk 2.0. We are confident, however, that the figures can be used for estimating version 3.0 database sizes as the main tables remain unchanged. To be certain that the calculations are good, we are currently testing Service Desk 3.0 with live data.

Oracle Database

This section contains information on the sizing of a database for HP OpenView Service Desk 3.0 running on Oracle 8. Oracle version 8.0.5 was used in calculating the requirements.

Database sizes will be given for two separate Oracle accounts. One account facilitates the storage of the Service Desk repository, the data that describes the application. The second account is used for the data related to the processes managed by Service Desk, like the helpdesk process.

For both accounts an estimate will be given of the storage space that will always be needed, and the additional space needed when adding large amounts of managed data.

Note that the estimates given in this document are deliberately on the safe side; your actual data may take up less space. A more accurate estimate can be obtained by comparing the data characteristics at an actual site with the assumptions listed for the calculation, and adjusting the estimates accordingly.

An Excel spreadsheet is supplied on the Service Desk 3.0 CD to enable you to calculate the database sizes easily. Instructions for using the spreadsheets are provided within the Excel file. The Oracle database spreadsheet can be found at the location `\\Doc\Database Sizing\SD Oracle8 Sizing.xls`.

Repository Database Account

The initial contents of the repository uses approximately 8 MB of disk space. Upon installation, the repository contains about 150 views, about 120 forms, and about 100 templates.

Most of the repository's tables are static after installation. Only for a limited number of entities is the addition of a larger amount of data likely to occur. The following table gives an estimate of the amount of

additional storage space needed for objects added to each entity.

Table 1-1 Additional Storage Space

Entity	kB needed per number of objects
Language	1200 per language
Account	300 per 1000 accounts
View	1000 per 100 views
Form	400 per 100 forms
Template	200 per 100 templates

Service Desk Database Account

Service Desk contains a number of entities that are static after installation, such as code values and support hours, that take about 640 kB of disk space. For every language added, an additional 128 kB must be reserved.

The operation of Service Desk is centered around a limited number of entities. For each of these entities, the volume processed is specific for the Service Desk implementation. The tables in this section present material for a rough estimate of the amount of storage space for every 1000 objects of a given entity.

Table 1-2 Basic Operational Data

Entity	kB needed for 1000 objects
Addresses	160
Locations	160
Telephones	80 (Telephone numbers include numbers for fax machines, cellular phones, pagers, etc.)
Attachments	300 (Not actual attachments, but administrative data.)

Table 1-3 Personnel and Organizational Data

Entity	kB needed for 1000 objects
Workgroups	3400
Organizations	4000
Persons	4300 (Assuming on average a person is a member of a single workgroup.)

Table 1-4 Configuration Management Data

Entity	kB needed for 1000 objects
Configuration items	5000 (Assuming on average a configuration item has one parent-child relation and one other relation with another configuration item, and one user is linked to each configuration item.)
Maintenance Contracts	4000

Table 1-5 Change Management Data

Entity	kB needed for 1000 objects
Changes	6000

Table 1-6 Helpdesk Management Data

Entity	kB needed for 1000 objects
Service Calls	8500 (Assuming on average a service call is related to one incident, change or problem.)
Incidents	6000

Table 1-7 Problem Management Data

Entity	kB needed for 1000 objects
Problems	6000

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Oracle Database

Table 1-8 Work Order Management Data

Entity	kB needed for 1000 objects
Work orders	5800 (Assuming on average a work order is related to a single configuration item.)

Computations

A rough estimate of the database storage needed can be obtained by filling in figures in the table below, or in the Excel spreadsheet:

Table 1-9 Repository Database Computations

Installed Contents	>	>	8000 kB
Language	each	x 1200 kB	
Account	per 1000	x 300 kB	
View	per 100	x 1000 kB	
Form	per 100	x 400 kB	
Template	per 100	x 200 kB	
Total:	>	>	

Table 1-10 Service Desk Database Computations

Static data	>	>	640 kB
Language	each	x 128 kB	
Addresses	per 1000	x 160 kB	
Locations	per 1000	x 160 kB	
Telephones	per 1000	x 80 kB	
Attachments	per 1000	x 300 kB	
Organizations	per 1000	x 4000 kB	
Persons	per 1000	x 4300 kB	

Table 1-10 Service Desk Database Computations

Workgroups	per 1000	x 3400 kB	
Configuration items	per 1000	x 5000 kB	
Maintenance contracts	per 1000	x 4000 kB	
Changes	per 1000	x 6000 kB	
Service calls	per 1000	x 8500 kB	
Incidents	per 1000	x 6000 kB	
Problems	per 1000	x 6000 kB	
Work orders	per 1000	x 5800 kB	
Total	>	>	

The following assumptions are included when estimating the amount of table space needed:

- 8-kB database blocks are used.
- Standard extent sizes of 10 kB, 50 kB, and 100 kB are used.
- Where non-mandatory fields exist in Service Desk tables, these are used up to 30 percent of their capacity.

Custom fields and comment fields on history lines are used up to 1 percent of their capacity.

An average of 10 history lines is entered with an entity.

Index entries exist for all table entries.

SQL Server Database

This section contains information on the sizing of a database for HP OpenView Service Desk 3.0 running on SQL Server 7.0.

Database space needed will be presented for two separate groups of data. One group contains the Service Desk repository, the data that describes the application. The second group is the data related to the processes managed by Service Desk, like the helpdesk process.

For both groups an estimate will be given of the storage space that will always be needed, and the additional space needed when adding large amounts of managed data.

Note that the estimates given in this document are deliberately on the safe side; your data may take up less space. A more accurate estimate can be obtained by comparing the data characteristics at an actual site with the assumptions listed for the calculations, and adjusting the estimates accordingly.

An Excel spreadsheet is supplied on the Service Desk 3.0 CD to enable you to calculate the database sizes easily. Instructions for using the spreadsheets are provided within the Excel file. The SQL Server database spreadsheet can be found at the location \\Doc\Database Sizing\SD SQL Server Sizing.xls.

Repository Database Account

The initial contents of the repository uses approximately 8 MB of disk space. Upon installation, the repository contains about 150 views, 120 forms, and 100 templates.

Most of the repository's tables are static after installation. Only a limited number of entities are likely to have data added to them. The following table gives an estimate of the amount of storage space needed for additional objects added to each of those entities.

Table 1-11

Additional Storage Space

Entity	kB needed per number of objects
Language	1400 per language

Table 1-11 Additional Storage Space

Entity	kB needed per number of objects
Account	240 per 1000 accounts
View	800 per 100 views
Form	300 per 100 forms
Template	400 per 100 templates

Service Desk Database Account

Service Desk contains a number of entities that are essentially static after installation. These are entities like code values and support hours. These take about 560 kB of disk space. For every language added, an additional 192 kB must be reserved.

The operation of Service Desk is centered around a limited number of entities. For each of these entities, the volume processed will be specific to the Service Desk implementation. The tables in this section present material for a rough estimate of the amount of storage space for every 1000 objects of a given entity.

Table 1-12 Basic Operational Data

Entity	kB needed for 1000 objects
Addresses	240
Locations	200
Telephones	160 (Telephone numbers include numbers for fax machines, cellular phones, pagers, etc.)
Attachments	360 (Not actual attachments, but administrative data.)

Table 1-13 Personnel and Organizational Data

Entity	kB needed for 1000 objects
Workgroups	4100

Database Sizing
SQL Server Database

Table 1-13 Personnel and Organizational Data

Entity	kB needed for 1000 objects
Organizations	5300
Persons	5700 (Assuming on average a person is a member of a single workgroup.)

Table 1-14 Configuration Management Data

Entity	kB needed for 1000 objects
Configuration items	6300 (Assuming on average a configuration item has one parent-child relation and one other relation with another configuration item, and one user is linked to each configuration item.)
Maintenance contracts	3800

Table 1-15 Change Management Data

Entity	kB needed for 1000 objects
Changes	7000

Table 1-16 Helpdesk Management Data

Entity	kB needed for 1000 objects
Service Calls	10000 (Assuming on average a service call is related to one incident, change or problem.)
Incidents	7000

Table 1-17 Problem Management Data

Entity	kB needed for 1000 objects
Problems	7000

Table 1-18 Work Order Management Data

Entity	kB needed for 1000 objects
Work orders	700 (Assuming on average a work order is related to a single configuration item.)

Computations

A rough estimate of the database storage needed can be obtained using the figures outlined below, or in the Excel spreadsheet:

Table 1-19 Repository Database Computations

Installed Contents	>	>	8000 kB
Language	each	x 1400 kB	
Account	per 1000	x 240 kB	
View	per 100	x 800 kB	
Form	per 100	x 300 kB	
Template	per 100	x 400kB	
Total:	>	>	

Table 1-20 Service Desk Database Computations

Static data	>	>	560 kB
Language	each	x 192 kB	
Addresses	per 1000	x 240 kB	
Locations	per 1000	x 200 kB	
Telephones	per 1000	x 160 kB	
Attachments	per 1000	x 360 kB	
Organizations	per 1000	x 5300 kB	
Persons	per 1000	x 5700 kB	
Workgroups	per 1000	x 4100 kB	

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SQL Server Database

Table 1-20 Service Desk Database Computations

Configuration Items	per 1000	x 6300 kB	
Maintenance contracts	per 1000	x 3800 kB	
Changes	per 1000	x 7000 kB	
Service calls	per 1000	x 10000 kB	
Incidents	per 1000	x 7000 kB	
Problems	per 1000	x 7000 kB	
Work orders	per 1000	x 7000 kB	
Total	>	>	

The following assumptions are included when estimating the amount of table space needed:

- Where optional fields exist in Service Desk tables, these are used up to 30 percent of their capacity.
- Custom fields and comment fields on history lines are used up to 1 percent of their capacity.
- An average of 10 history lines is entered with an entity.
Index entries exist for all table entries.