

BMC[®] Service Desk Express

Hardware & Software Requirements SDE 10.0

BMC Service Desk Express – Version 10.0 - HW & SW Requirements

Understanding the Installation Process

The installation process begins with planning your computer environment and continues through installing and (optionally) customizing the BMC Service Desk Express components. The installation workflow includes the following tasks:

- Plan for the installation.
 - Select the appropriate deployment for your organization.
 - Plan your hardware and software configurations.
 - Choose and set up your administrators.
- Create your Microsoft SQL or Oracle® database.
- Install the BMC Service Desk Express application server.
- Configure BMC Service Desk Express components.
- Define your business requirements.
- Customize the application
 - Customize the BMC Service Desk Express application server.
 - Configure the application.
 - Set up Self Service Desk.
 - Create business rules.
 - Customize what your users see.

Planning For the Installation

Successful installation of BMC Service Desk Express requires careful planning. You must select the deployment scenario that best meets the needs of your organization and make sure that all hardware and software requirements are met before installing BMC Service Desk Express.

Deployment Scenarios

The scalable architecture of BMC Service Desk Express gives you the flexibility to install the application across a wide range of deployment scenarios. Whether your organization is small, medium, or large based on the number of users, BMC Service Desk Express is designed to meet your business requirements and automate complex business processes.

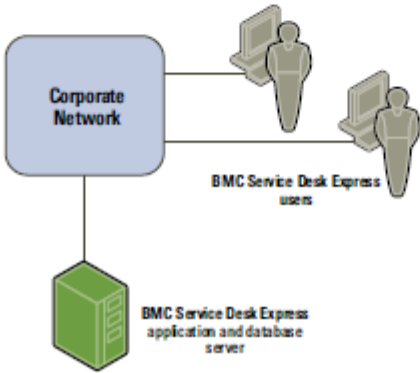
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Table 1-1: Recommended server deployments

Number of Concurrent Users	Deployment
Small deployment 1-10 (approximately)	Total configuration: one computer (see Figure 1-1 on page 15) Server 1: Application server, database server, reports component, and BMC Service Desk Express Business Automation component all on one computer. Performance tip: If performance is not satisfactory, separate the application and the database server onto two different computers.
Medium deployment 10-40 (approximately)	Total configuration: two computers (see Figure 1-2 on page 16) Server 1: Application server Server 2: Database server Performance tip: If performance of the reports component or business automation is not satisfactory, add another application server dedicated to the reports component or business automation.
Large deployment Greater than 40	Total configuration: four computers (see Figure 1-3 on page 17) Server 1: 2-processor application server Server 2: 4-processor database server Server 3: Reports component on a dedicated application server Server 4: Business automation component on a dedicated application server Server 5: BMC Service Desk Express Integration Engine on a dedicated server Performance tip: If performance is not satisfactory, add a web server farm.

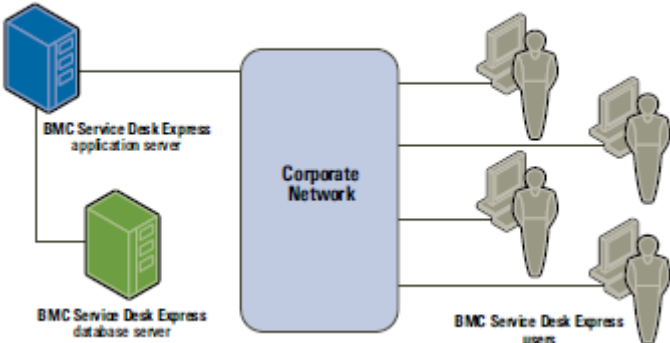
The following figure show the single-server architectures for a small deployment of 1-10 concurrent users.

Figure 1-1: Small business deployment



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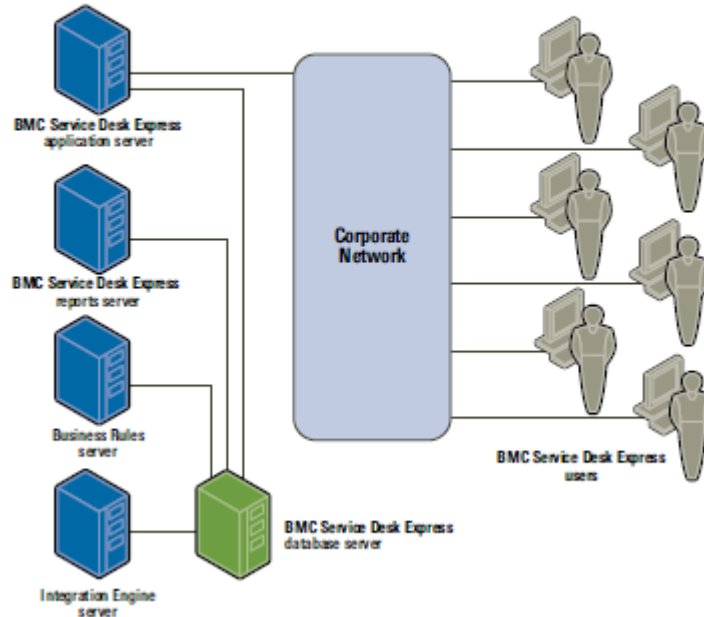
Figure 1-2: Medium business deployment



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The following figure show the two-server architectures for a large deployment of 40 or more concurrent users.

Figure 1-3: Large business deployment



Server Hardware Recommendations

Table 1-2 and Table 1-3 identify the minimum hardware recommendations for the BMC Service Desk Express application. Table 1-2 shows the recommendations for installing the BMC Service Desk Express application and database servers on the same computer (small deployment). Table 1-3 shows the recommendations when installing the BMC Service Desk Express application and database servers on separate computers (medium to large deployments).

IMPORTANT

Running the BMC Service Desk Express (including the application server or Integration Engine) on a domain controller or PDC (primary domain controller) is not supported.

These hardware recommendations are guidelines only and might not be specific to your work environment. Your hardware needs are also affected by your network configuration and installed applications.

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In addition, the listed memory recommendations do not take into account any additional applications that might be installed on your system. Depending on the number and type of applications you have installed, it might be necessary to install additional memory to efficiently run all applications.

Table 1-2: Server recommendations for setting up BMC Service Desk Express on the same computer

BMC Service Desk Express Application Server, Integration Engine, and Web services component requirement	
■ Processor	■ 2GHz or faster ■ Second processor (optional)
■ Memory	■ 2 GB RAM or greater
■ Disk Space	■ 1 GB of free disk space ■ 2 GB disk space for external documents

Table 1-3: Server recommendations for installing on separate computers

BMC Service Desk Express Application Server component requirement			
	BMC Service Desk Express Application Server	BMC Service Desk Express Integration Engine	BMC Service Desk Express Database Server
■ Processor	■ 1GHz or faster	■ 2GHz or faster	■ 2GHz or faster ■ Second processor (optional)
■ Memory	■ 1 GB RAM or greater	■ 1 GB RAM or greater	■ 1 GB RAM or greater
■ Disk Space	■ 500 MB of free disk space ■ 2 GB disk space for external documents	■ 500 MB of free disk space	■ 1 GB of free disk space ■ SCSI RAID5 array

TIP

BMC recommends that you install the database server and the application server on the same network.

NOTE

The hardware requirements for running BMC Service Desk Express on one or more VMware images are the same as running the product on one or more physical computers plus the resources required to run the host operating systems.



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Server Supported & Required Software

Software requirements

The tables in this section list the software requirements needed to support BMC Service Desk Express in a Windows 2005/2008 environment.

NOTE

If you are using a Windows 2003 system, you must install IIS manually before installing BMC Service Desk Express. For more information about installing IIS, see your Windows 2003 documentation.

The BMC Service Desk Express web application does not support the ASP.NET features for recycling worker processes. When BMC Service Desk Express is installed, these features are disabled. If these features are enabled after installation, BMC Service Desk Express might not perform as expected, including sessions unexpectedly timing out.

IMPORTANT

The Oracle server and client software must be at the same version.

IMPORTANT

To integrate other BMC applications, such as BMC ProactiveNet or BMC Configuration Management (CM) with BMC Service Desk Express, you must install those applications separately. For more information about installing other BMC applications, see the specific documentation for those applications.

The following table describes the software requirements for a server that hosts the BMC Service Desk Express application. For a large configuration in which business automation, reports, BMC Service Desk Express Integration Engine, and BMC Service Desk Express application are separate servers, the software requirements are the same for each server.

The BMC Service Desk Express software requirements are subject to the following limitations:

- Operating system upgrades for BMC Service Desk Express customers from Windows NT 4.0 to Windows 2000/2003 are not supported. Instead, you must install BMC Service Desk Express on a clean Windows 2003/2008 system.

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- If you are using a Microsoft SQL Server 2005/2008 database, you must install it using mixed authentication.

Table 1-4: Application server software

Software	Supported versions
Operating system	<ul style="list-style-type: none"> ■ Windows Server 2008 R2 Enterprise Edition ■ Windows Server 2008 R2 Web Server Edition ■ Windows Server 2008 (x86) Service Pack 2 ■ Windows Server 2008 (x64) Service Pack 2 ■ Windows Server 2008 (x86) Service Pack 1 ■ Windows Server 2008 (x64) Service Pack 1 ■ Windows Server 2008 (x86) ■ Windows Server 2008 (x64) ■ Windows Server 2003 R2 Service Pack 2 (x86) ■ Windows Server 2003 R2 Service Pack 2 (x64) ■ Windows Server 2003 Service Pack 2 (x86) ■ Windows Server 2003 Service Pack 2 (x64)
Web server	<ul style="list-style-type: none"> ■ Windows Server 2008: IIS 7.0 ■ Windows Server 2003: IIS 6.0 <p>Note: BMC Service Desk Express supports Secure Sockets Layer (SSL).</p>
MDAC	MDAC 2.8 Service Pack 1
MSXML	MSXML 6.0 Service Pack 1
JRE™	6.0
.NET Framework	.NET 3.5 Service Pack 1 .NET 3.5 .NET 3.0 .NET 2.0 Service Pack 1
Browser	One of the following browsers: <ul style="list-style-type: none"> ■ Internet Explorer 8.0 with compatibility view ■ Internet Explorer 7.0 ■ Internet Explorer 6.0 with Service Pack 1 ■ Internet Explorer 6.0
Oracle database	<ul style="list-style-type: none"> ■ Oracle 11.0.1.7 (plus patches) Client ■ Oracle 10.2.0.4 (plus patches) Client
Additional Windows components	<ul style="list-style-type: none"> ■ SMTP ■ Indexing Service

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The following table describes the software requirements for a server that hosts the BMC Service Desk Express database.

Table 1-5: Database server software

Software	MS SQL	Oracle
Database	<p>The following versions are supported:</p> <ul style="list-style-type: none"> ■ Microsoft SQL Server 2008 (x86) ■ Microsoft SQL Server 2008 (x86) Express ■ Microsoft SQL Server 2008 (x64) ■ Microsoft SQL Server 2005 Service Pack 3 (x86) ■ Microsoft SQL Server 2005 Service Pack 3 (x64) 	<p>The following versions are supported:</p> <ul style="list-style-type: none"> ■ Oracle 11g ■ Oracle 10g
Operating system	<p>The following operating systems are supported:</p> <ul style="list-style-type: none"> ■ Windows Server 2008 R2 Enterprise Edition ■ Windows Server 2008 R2 Web Server Edition ■ Windows Server 2008 Standard/Enterprise Edition (x86, x64) ■ Windows Server 2003 R2 Service Pack 2 (x86) ■ Windows Server 2003 R2 Service Pack 2 (x64) ■ Windows Server 2003 Service Pack 2 (x86) ■ Windows Server 2003 Service Pack 2 (x64) 	<p>The following operating systems are supported:</p> <ul style="list-style-type: none"> ■ Windows Server 2008 R2 Enterprise Edition ■ Windows Server 2008 R2 Web Server Edition ■ Windows Server 2008 Standard/Enterprise Edition (x86, x64) ■ Windows Server 2003 R2 Service Pack 2 (x86) ■ Windows Server 2003 R2 Service Pack 2 (x64) ■ Windows Server 2003 Service Pack 2 (x86) ■ Windows Server 2003 Service Pack 2 (x64) ■ IBM® AIX® 6.1 or higher ■ HP-UX 11.0 ■ Redhat Enterprise Linux® 5.2 ■ Sun™ Solaris™ 10 or later <p>For more information about the system patches and other requirements for these operating systems, see the appropriate installation guide at:</p> <p>http://www.oracle.com/technology/documentation/oracle9i.html</p> <p>http://www.oracle.com/technology/documentation/database10gR2.html</p>
MDAC	MDAC 2.8 Service Pack 1	<ul style="list-style-type: none"> ■ MDAC 2.8 Service Pack 1 ■ OraOleDB 10g fixes
MS XML	MSXML 6.0 Service Pack 2	MSXML 6.0 Service Pack 2
JRE™	6.0u7	6.0u7

The BMC Service Desk Express software requirements are subject to the following limitations:

- Operating system upgrades for BMC Service Desk Express customers from Windows 2000 to Windows2003 are not supported. Instead, you must install BMC Service Desk Express on a clean Windows 2003/2008 system.
- If you are using a Microsoft SQL Server 2005/2008 database, you must install it using mixed authentication.

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The following table describes the software requirements for a server that hosts the BMC Service Desk Express database.

Table 1-5: Database server software

Software	MS SQL	Oracle
Database	<p>The following versions are supported:</p> <ul style="list-style-type: none"> ■ Microsoft SQL Server 2008 (x86) ■ Microsoft SQL Server 2008 (x86) Express ■ Microsoft SQL Server 2008 (x64) ■ Microsoft SQL Server 2005 Service Pack 3 (x86) ■ Microsoft SQL Server 2005 Service Pack 3 (x64) 	<p>The following versions are supported:</p> <ul style="list-style-type: none"> ■ Oracle 11g ■ Oracle 10g
Operating system	<p>The following operating systems are supported:</p> <ul style="list-style-type: none"> ■ Windows Server 2008 R2 Enterprise Edition ■ Windows Server 2008 R2 Web Server Edition ■ Windows Server 2008 Standard/Enterprise Edition (x86, x64) ■ Windows Server 2003 R2 Service Pack 2 (x86) ■ Windows Server 2003 R2 Service Pack 2 (x64) ■ Windows Server 2003 Service Pack 2 (x86) ■ Windows Server 2003 Service Pack 2 (x64) 	<p>The following operating systems are supported:</p> <ul style="list-style-type: none"> ■ Windows Server 2008 R2 Enterprise Edition ■ Windows Server 2008 R2 Web Server Edition ■ Windows Server 2008 Standard/Enterprise Edition (x86, x64) ■ Windows Server 2003 R2 Service Pack 2 (x86) ■ Windows Server 2003 R2 Service Pack 2 (x64) ■ Windows Server 2003 Service Pack 2 (x86) ■ Windows Server 2003 Service Pack 2 (x64) ■ IBM® AIX® 6.1 or higher ■ HP-UX 11.0 ■ Redhat Enterprise Linux® 5.2 ■ Sun™ Solaris™ 10 or later <p>For more information about the system patches and other requirements for these operating systems, see the appropriate installation guide at:</p> <p>http://www.oracle.com/technology/documentation/oracle9i.html http://www.oracle.com/technology/documentation/database10gR2.html</p>
MDAC	MDAC 2.8 Service Pack 1	<ul style="list-style-type: none"> ■ MDAC 2.8 Service Pack 1 ■ OraOleDb 10g fixes
MS XML	MSXML 6.0 Service Pack 2	MSXML 6.0 Service Pack 2
JRE™	6.0u7	6.0u7

The BMC Service Desk Express software requirements are subject to the following limitations:

- Operating system upgrades for BMC Service Desk Express customers from Windows 2000 to Windows2003 are not supported. Instead, you must install BMC Service Desk Express on a clean Windows 2003/2008 system.
- If you are using a Microsoft SQL Server 2005/2008 database, you must install it using mixed authentication.

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- By default, the registry entries for a 64-bit application populate and fetch registry values from HKEY_LOCAL_MACHINE\SOFTWARE, whereas the registry entries for a 32-bit application installed on an x64 operating system populate and fetch registry values from HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node.

BMC Service Desk Express 10.0 is a 32-bit application and can be installed as a 32-bit application on a 64-bit operating system. Certain Internet Information Services (IIS) settings are required, as described in the following section.

Internet Information Services (IIS) 7.0 settings

BMC Service Desk Express 10.0 automatically handles the IIS 7.0 roles and features for installation on Microsoft Windows 2008 Operating System. BMC Service Desk Express 10.0 checks the following items:

- IIS 7.0 Server Role Service

If you have not IIS 7.0 Server Role Service installed, you receive the following message:

This computer does not have IIS 7.0 Server Role Service. Setup cannot continue without this feature. Do you want the installer to install it on this computer?

Click Yes to continue the installation of IIS 7.0 Server Role Service. If you click No, you receive the following message:

Please install IIS 7.0 Server Role Service before continuing. Setup shall now abort.

- IIS 6.0 Management Compatibility

Enabling IIS 6.0 Management Compatibility allows backward compatibility while applications running on IIS7.0 continue to function as expected.

IIS 6.0 supports the 32-bit mode and the 64-bit mode. However, IIS 6.0 does not support both modes simultaneously on a Windows 64-bit version.

When you are trying to enable IIS 6.0 Management Compatibility, if a corrupt key is present, the installation of BMC Service Desk Express 10.0 aborts.

- ASP.NET Application Development utility

When you are trying to enable the ASP.NET Application Development utility, if a corrupt key is present, the installation of BMC Service Desk Express 10.0 aborts else the following message is displayed.

Setup is installing ASP.NET Application Development utility

- ASP Application Development utility

When you are trying to enable the ASP Application Development utility, if a corrupt key is present, the installation of BMC Service Desk Express 10.0 aborts.

- Basic Authentication

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When you are trying to enable the Basic Authentication Application Development utility, if a corrupt key is present, the installation of BMC Service Desk Express 10.0 aborts else the following message is displayed

```
Setup is installing Basic Authentication Application
Development utility
```

■ SMTP service

If you have not previously installed the IIS SMTP Service, you receive the following message:

```
The IIS SMTP service is not installed. SMTP and mail
notification features of BMC Service Desk Express will not
operate without this service. Do you want the installer to
install it?
```

Click Yes to continue the installation of IIS SMTP Service. If you click No, you receive the following message:

```
The IIS SMTP service is not installed. SMTP and mail
notification features of BMC Service Desk Express will not
operate without this service. Installation of IIS SMTP Service
continues.
```

■ Content Indexing Service

If you have not previously installed the Content Indexing Service, you receive the following message:

```
The Content Indexing Service is disabled or is not installed.
Knowledge Search features of BMC Service Desk Express will not
operate without this service. Do you want the installer to
install it?
```

Click Yes to continue the installation of Content Indexing Service. If you click No, you receive the following message:

```
The Content Indexing Service is disabled or is not installed.
Knowledge Search features of BMC Service Desk Express 10.0 will
not operate without this service.
```

Installation of Content Indexing Service continues.

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Workstation Requirements

Table 1-6 lists the minimum hardware, operating system, and browser requirements for client workstations.

Table 1-6: Workstation requirements

Client workstation	BMC Service Desk Express staff Interface requirements and supported versions	Self Service and Client Services Interface requirements and supported versions
Hardware	<ul style="list-style-type: none"> ■ Pentium III 500 MHz or equivalent ■ 512 MB RAM 	<ul style="list-style-type: none"> ■ Pentium III 500 MHz or equivalent ■ 512 MB RAM
Operating system	<ul style="list-style-type: none"> ■ Windows Vista ■ Windows XP Professional with Service Pack 2 ■ Windows XP Professional SP3 	<ul style="list-style-type: none"> ■ Windows Vista ■ Windows XP Professional with Service Pack 2 ■ Windows XP Professional SP3 ■ Mac OS 10.4.11 and 10.5
Browser	<ul style="list-style-type: none"> ■ Internet Explorer 8.0 ■ Internet Explorer 7.0 ■ Internet Explorer 6.0 with Service Pack 1 <p>Note: If you use IE 6.0, the expression builder does not open when you double-click a field. However, it does open if you select the menu and click "Details."</p>	<ul style="list-style-type: none"> ■ Internet Explorer 8.0 ■ Internet Explorer 7.0 ■ Internet Explorer 6.0 with Service Pack 1 ■ Firefox 2.0.0.6 (Windows and Mac) ■ Firefox 3.5 <p>Note: In Firefox, the pop-up blocker is enabled by default. You must turn off your pop-up blocker to view attachments in BMC Service Desk Express.</p> <ul style="list-style-type: none"> ■ Safari 3.0.6 <p>Note: Safari 3.0.6 does not support Windows Integrated Authentication (WIA).</p>

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Optional Software Support

Table 1-7 lists the supported software that works with BMC Service Desk Express.

Table 1-7: Optional software support

Software type	Supported software version	Notes
Knowledge management	BMC Knowledge Management Express 9.2	
Remote access	VNC Enterprise 4.5.1 Bomgar 10.3.2	
ITSME applications	BMC Bladelogic Client Automation 8.1 (Formerly, BMC Configuration Manager Express)	Use to integrate with BMC Service Desk Express
	BMC Performance Manager 2.7	Use to integrate with BMC Service Desk Express
LDAP authentication	OpenLDAP 2.3.30-2.fc6	Must select LDAP authentication during installation.
	Windows Server 2003/2008	Must select LDAP authentication during installation.
Configuration management	Microsoft System Center Configuration Manager 2007 Service Pack 1	
Project management	Microsoft Project Server 2007 Service Pack 1	
Mail management	Microsoft Exchange Server 2007	
Event notification	Microsoft System Center Operations Manager 2007 Service Pack 1	
	BMC ProactiveNet 8.0	
508 compliance	Jaws 6.1	

Defining your Business Requirements

Installation does not end after the software is installed and configured. You must evaluate your business practices and address local requirements. Some items to consider include:

- Your backup strategy—Define how often and who backs up your data.
- Define your business rules—The *BMC Service Desk Express Business Rules Administrator's Guide* describes what you must know to create business rules.
- Define what information you want on your forms and how you want the forms to appear—Use the Customization Wizard to tailor the forms to your needs. The *BMC Service Desk Express Administrator's Guide* discusses the Customization Wizard in detail.
- Evaluate whether the predefined reports provide you with the information you need—You might want to modify the predefined reports or design new reports based on the information in the BMC Service Desk Express database using Crystal Reports Professional 10.0.

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Configuring the Application

After the application software is installed, you can configure it to support your business requirements. The BMC Service Desk Express application provides you with the following tools to configure the application to fit your specific needs:

- **Customization Wizard**—This wizard provides a way to change the look and feel of forms, navigator bars, pop-up windows, and print previews based on the specific requirements of your organization, departments, and staff members. See the *BMC Service Desk Express Administrator's Guide* for detailed instructions about these activities.
- **Business rules tool**—This tool allows you to create business rules to help automate a business process and define conditions that cause a rule or task to run. See the *BMC Service Desk Express Business Rules Administrator's Guide* for detailed instructions about these activities.
- **Reports configuration**—The Reports module allows you to run and view reports. The Report Configuration web applet allows you to customize how report lists and report categories appear to your users. See the *BMC Service Desk Express User's Guide* and the *BMC Service Desk Express Administrator's Guide* for detailed instructions about these activities.
- **Knowledge Search configuration**—The Knowledge Search engine is installed when the BMC Service Desk Express application is installed. Knowledge Search allows you to search the incidents database and other external documents during a query. You can also search all user modules (for example, incidents, work orders, and business rules). For more information about knowledge search configuration, see the *BMC Service Desk Express Administrator's Guide*.
- **Self Service**—This module allows you to configure and customize the defaults for clients who use Self Service for creating and resolving their incidents. For detailed instructions about these activities, see the *BMC Service Desk Express Self Service and Client Services Administrator's Guide*.
- **Update License utility**—This utility provides logging, notification, and reporting as part of the license counting feature as well as options to help you resolve license corruption issues. For more information, see "Update License utility" on page 69.