

Service Desk 7.5 Service Desk Appliance Deployment and Administration Reference

March 2018

Legal Notice

For information about legal notices, trademarks, disclaimers, warranties, export and other use restrictions, U.S. Government rights, patent policy, and FIPS compliance, see https://www.novell.com/company/legal/.

Copyright © 2018 Micro Focus Software Inc. All Rights Reserved.

About This Guide

This *Service Desk Appliance Deployment and Administration Reference* helps you to deploy and configure Service Desk Appliance to the Service Desk supported virtual infrastructure.

The information in this guide is organized as follows:

- Chapter 1, "Overview," on page 7
- Chapter 2, "System Requirements," on page 9
- Chapter 3, "Appliance Deployment," on page 11
- Chapter 4, "Service Desk Configuration," on page 13
- Chapter 5, "Appliance Management," on page 15
- Chapter 6, "Service Desk System Management," on page 23
- Chapter 7, "Migrating Service Desk Appliance," on page 29
- Chapter 8, "Migrating Service Desk (Standalone)," on page 33

Audience

This guide is intended for Service Desk administrators.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation.

Additional Documentation

Service Desk is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the Service Desk Documentation site.

Contents

	Abou	ut This Guide	3	
1	Over	view	7	
2	Syst	ystem Requirements 9		
	2.1	System Integration	10	
3	Appl	iance Deployment	11	
	3.1 3.2	Deploying the Appliance		
4	Serv	ice Desk Configuration	13	
	4.1	Configuring the Service Desk Server		
	4.2	Logs	13	
5	Appl	iance Management	15	
	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 5.10 5.11	Ganglia Configuration 5.1.1 Enabling Ganglia Monitoring Ganglia Monitoring Network Time Digital Certificates 5.5.1 Using the Digital Certificate Tool 5.5.2 Using an Existing Certificate and Key Pair 5.5.3 Activating the Certificate 5.5.4 Managing Certificates 5.5.4 Managing Certificates Storage System Services 5.7.1 Starting, Stopping, or Restarting System Services 5.7.2 Setting System Services to Automatic or Manual Firewall Administrative Passwords Online Update Shutting Down and Restarting Service Desk Appliance.	16 17 17 17 18 19 19 20 20 20 20 20 21 21 21	
6	Serv	ice Desk System Management	16 17 17 17 17 17 17 18 19 19 19 20 20 20 20 20 20 20 20 20 20 20 20 20	
	6.1 6.2 6.3	Service Desk Configuration Terminal and File Explorer 6.2.1 Terminal 6.2.2 File Explorer Logs	24 24 25	
	6.4	Configuring Service Desk.		

7	Migrating Service Desk Appliance		
	7.1	Pre-Migrate	
	7.2	Migrating the Service Desk Appliance	30
	7.3	Post Migrate	30
8	B Migrating Service Desk (Standalone)		33
	8.1	Pre-Migrate	
	8.2	Migrating to the Service Desk	34

Overview

Service Desk is available as a virtual appliance that can be deployed to a supported virtual infrastructure. Service Desk Appliance is built on a customized SUSE Linux Enterprise Server (SLES), and comes pre-installed with Service Desk and thus helps save on operating system license costs.

After deployment, Service Desk can be configured by using an easy to use web based Console. Also, the same console can be used to maintain Service Desk Appliance and perform basic tasks such as executing commands, starting and stopping services, viewing logs, uploading, and downloading files.

You can also tweak basic server settings and monitor the server performance. With the new Service Desk Appliance, it is significantly easier to move to a new major version of Service Desk.

Appliance supports root and sdadmin users.

The users have the following privileges:

- Appliance Configuration
 - Ganglia Configuration
 - Ganglia Monitoring
 - Network
 - Time
 - Storage
 - System Services
 - Firewall
 - Administrative Passwords
 - Online Update
 - Shutting Down and Restarting Service Desk Appliance

Service Desk Appliance

- Terminal and File Explorer
- Logs
- Service Desk
- On Appliance
 - Ganglia Configuration
 - Ganglia Monitoring
 - System Services
 - Administrative Passwords
 - Online Update
 - Shutting Down and Restarting Service Desk Appliance
- On Service Desk
 - Terminal and File Explorer

- Logs
- Service Desk

2 System Requirements

Service Desk Appliance is a 64-bit (x86_64) virtual machine. The following sections provide the requirements for deploying Service Desk Appliance onto a virtual infrastructure:

Item	Requirements
Virtual Appliance	Service Desk Virtual Appliance can be deployed in the following virtual machine environments:
	 VMware Workstation 11.0 onwards
	 VMware ESXi 6.x
	 XEN on SLES and supported packs
Virtual Machine Configuration	Service Desk Appliance requires the following minimum configuration that have been preconfigured by default:
	• RAM: 4 GB minimum
	Disk Space: 40 GB minimum
	CPU Cores: 2
	Service Desk requires two hard disks. One hard disk of size 40 GB is pre-configured with the appliance that uses the SLES 12 SP3 operating system and the other hard disk of minimum size 15 GB should be added for the Service Desk data.
	Depending on your requirement, you can increase the pre- configured disk space after deploying Service Desk Appliance.
IP Address	The server must have a static IP address or a permanently leased DHCP address.
Database	Service Desk Appliance comes with pre-installed PostgreSQL database. However, you can choose the other supported database and that must meet the database requirements.
	For more information, see Database Support in the ZENworks Service Desk 7.5 Platform Support Matrix
Administration Browser	The following are supported web browsers for the appliance console:
	Internet Explorer 11
	Chrome version 63 and higher
	 Firefox ESR version 52
	 Firefox version 56 and higher

Item	Requirements
Supported Languages	These are the supported languages for the appliance console:
	 ♦ English - en
	 French - fr
	 German - de
	 Italian - it
	 Polish - pl
	 Spanish - es

2.1 System Integration

ZENworks Service Desk 7.5 supports integration with the following:

- ZENworks 2017
- ZENworks 2017 Update 1
- ZENworks 2017 Update 2

To deploy Service Desk Appliance, perform the tasks in the following sections:

- Section 3.1, "Deploying the Appliance," on page 11
- Section 3.2, "Configuring the Appliance Settings," on page 11

3.1 Deploying the Appliance

To deploy Service Desk Appliance, perform the following:

- 1 Ensure that the virtual machine to which you want to deploy Service Desk Appliance meet the requirements listed in *Chapter 2, "System Requirements," on page 9.*
- 2 Download the Service Desk Appliance file from the *Micro Focus Download* website.

Based on your hypervisor, download any of the following files:

- VMware ESXi: Download the .ova file.
- SUSE Xen Server on SLES 12: Download the xen.tar.gz file.
- **3** Deploy the Service Desk Appliance to a Hypervisor by using the downloaded (.ova, or xen.tar.gz) file.
- 4 Take a snapshot of the virtual machine that you created.

To save the state and data of a virtual machine at a specific point in time. A snapshot can save time in case of any configuration failure.

5 After deploying Service Desk Appliance, you must add a hard disk of size minimum 15 GB for the Service Desk data before you power on the Virtual Machine.

Depending on your content requirement, you can increase the pre-configured disk space after deploying Service Desk Appliance.

6 Continue with the next task, Section 3.2, "Configuring the Appliance Settings," on page 11.

3.2 Configuring the Appliance Settings

To configure the appliance settings, perform the following:

- 1 On the License Agreement page, select the required License Language and Keyboard Language, then click Accept.
- 2 On the Passwords and Time Zone page, specify the following information, and then click Next:
 - + root Password and Confirmation: The root password for Service Desk Appliance.
 - sdadmin Password and Confirmation: The sdadmin password for Service Desk Appliance.
 - NTP Server: The IP address or DNS name of the external Network Time Protocol (NTP) server.

It is recommended to set up the NTP server in accordance with the virtual infrastructure guidelines.

- **Optional NTP Server:** The IP address or DNS name of the external Network Time Protocol (NTP) server.
- Region: The local region.
- **Time Zone:** The local time zone.
- 3 On the Network Settings Page, you can:
 - Select the Static IP Address: If you select this option, then perform Step 4.
 - Select the DHCP IP Address: If you select this option, enter the Host name, and then click Next.
- 4 On the Network Settings page, specify the following information, and then click Next:
 - Hostname: The Fully Qualified Domain Name (FQDN) associated with the appliance IP address. For example, server.domain.com.

The hostname must be resolveable, or some features in Service Desk do not work properly. Server names must support the DNS requirements, or the Service Desk login fails. Acceptable characters are the letters a-z (uppercase and lowercase), numbers, and the hyphen (-).

- Obtain IP Address using DHCP: Select this option to get the IP Address using DHCP address. If you select this option IP Address and Network Mask will be disabled.
- **IP Address:** The server must have a static IP address or a permanently leased DHCP address.
- Network Mask: The network mask associated with the appliance IP address.
- Gateway: The IP address of the gateway on the subnet where Service Desk Appliance is located.
- DNS Server: The IP address of a primary DNS server for your network.
- **Optional DNS Server:** The IP address of a primary DNS server for your network.
- **Domain Search:** By default, domain that you specified in the Hostname field is displayed.
- Optional Domain Search: The alternate domain.

If you have not added a hard disk after deployment, then a warning message is displayed. In this scenario, you need to power off the virtual machine, add a hard disk, power on, and then continue with *Step 2*.

- 5 On the Data Store Location page, verify the new hard disk that you added.
- 6 Click Configure.

After the appliance configuration, URL is displayed. Use the URL (https://<FQDN>:9443) for administering the appliance and configuring Service Desk.

7 Continue with the next task, Chapter 4, "Service Desk Configuration," on page 13.

4 Service Desk Configuration

The following sections provide the configuration flow for these process:

- Section 4.1, "Configuring the Service Desk Server," on page 13
- Section 4.2, "Logs," on page 13

4.1 Configuring the Service Desk Server

This is applicable for a fresh installation of Service Desk. After deploying the Service Desk Appliance to a virtual machine, perform the following steps to configure Service Desk Appliance:

1 Launch the URL on a supported web browser.

The URL (https://<FQDN>:9443 or https://<ipaddress>:9443) is displayed on the appliance console.

2 Choose the required language. If the web browser supports the selected language, then it displays in that language, else it displays in English.

For information, see Section 2, Supported Languages in System Requirements.

- 3 Log in to Service Desk Appliance with the root or sdadmin credentials that were specified in *Step 2*, in the *Section 3.2, "Configuring the Appliance Settings," on page 11.*
- 4 (Optional) Configure the certificate for Service Desk.

By default Service Desk is configured with an Internal Certificate. If you want to use your own certificate, then see *Section 5.5, Digital Certificates*, in *Appliance Management*.

5 (Optional) Configure the database for Service Desk.

By default Service Desk includes an embedded database. If you want to use an external database or to change the password of embedded database, see *Service Desk Configuration*.

After Service Desk is configured, from the **Home** page you can use the Service Desk console to access the Service Desk Management capabilities.

By default the user credentials for the administrator is admin and for the supervisor is super.

4.2 Logs

Before configuring Service Desk, all logs are stored in the /var/opt/novell/jetty/logs/ jetty.stderrout.out location.

While configuring and after configuring Service Desk, all logs are stored in the /var/opt/novell/ log/ServiceDesk/LiveTime/LiveTime.log location.

5 Appliance Management

In Service Desk Appliance, a web based interface is provided to manage the appliance. The user interface helps you to configure and perform operations on a Service Desk Server. Based on the logged-in user the tiles are displayed.

To manage Service Desk, see Chapter 6, "Service Desk System Management," on page 23.

Service Desk Appliance enables you to reconfigure settings of the appliance, such as administrative passwords, network settings, and certificate settings.

Service Desk Appliance supports root and nsdusers. You must use the root user if you want to perform any operations on the appliance and Service Desk.

To manage Appliance:

1 On a supported web browser, launch the URL to access the Management Console.

The URL (https://<FQDN>:9443 or https://<ipaddress>:9443) that is displayed on the appliance console.

2 Specify the login credentials, then click Log in.

The following options are displayed in the Appliance Configuration:

- Section 5.1, "Ganglia Configuration," on page 15
- Section 5.2, "Ganglia Monitoring," on page 17
- Section 5.3, "Network," on page 17
- Section 5.4, "Time," on page 17
- Section 5.5, "Digital Certificates," on page 17
- Section 5.6, "Storage," on page 20
- Section 5.7, "System Services," on page 20
- Section 5.8, "Firewall," on page 21
- Section 5.9, "Administrative Passwords," on page 21
- Section 5.10, "Online Update," on page 21
- Section 5.11, "Shutting Down and Restarting Service Desk Appliance," on page 22

5.1 Ganglia Configuration

Ganglia is a scalable, distributed monitoring system that enables you to gather information about the Service Desk Appliance system. The default metrics that you can monitor are CPU, disk, load, memory, network, and process.

NOTE: By default, Ganglia Configuration and Ganglia monitor services will be stopped. If required, you can manually start the Ganglia Configuration and Ganglia monitor services. For more information on enabling Ganglia Monitoring, see "*Enabling Ganglia Monitoring*".

- 1 On the Service Desk Appliance home page, in the Appliance Configuration section, click Ganglia Configuration.
- 2 You can change the following configuration options:
 - Enable Full Monitoring Services: Select this option to receive and store metrics from other appliances, and to allow the Ganglia Web Interface to run on the same device as the Service Desk Appliance.

You can disable Ganglia monitoring by clearing this option. You can perform this only if you have a monitoring system that you want to use for Service Desk Appliance, or if you want to configure a dedicated appliance for viewing monitoring information. (You can do this by selecting **Unicast** below; then specify the DNS name or IP address of the appliance where monitoring information is stored.)

- Enable monitoring on this appliance: Select this option to enable Ganglia monitoring on this appliance.
 - **Multicast:** Select this option to send monitoring information to other appliances on the network.
 - Unicast: Select this option to send monitoring information to a single destination.
 - **Publish to:** Specify the server where Ganglia sends monitoring information while it is running in Unicast mode.
- Monitoring Tool Options: Select this option to enable the monitoring tool to access this server through http port 9080 using a similar to http://:9080/gweb/.

3 (Optional) Click Reset Database to remove all existing Ganglia metrics from this appliance.

This option is not applicable to the Service Desk database.

4 Click OK.

For more information about how to use Ganglia monitoring with Service Desk Appliance, see *Section 5.2, "Ganglia Monitoring," on page 17.*

5.1.1 Enabling Ganglia Monitoring

Enable Ganglia monitoring by starting the following services:

- novell-gmond.service
- novell-gmetad.service
- apache2.service

To start the service momentarily, run the systemctl start <service_name> command.

NOTE: Whenever you restart the appliance, you should run the command to start the monitoring service.

To enable the services permanently run the systemctl enable <service_name> command.

5.2 Ganglia Monitoring

Ganglia is a scalable, distributed monitoring system that enables you to gather information about the Service Desk Appliance system. The default metrics that you can monitor are CPU, disk, load, memory, network, and process. For more information, see *Ganglia*.

5.3 Network

- 1 On the Service Desk Appliance home page, in the Appliance Configuration section, click Network.
- 2 Below DNS Configuration, you can modify the name servers, search domains, and gateway settings for the Service Desk Appliance network.
- **3** Below NIC Configuration, click the ID to modify the IP address, hostname, and network mask of any Network Interface Controller (NIC) associated with the appliance. (If multiple NICs are configured for Service Desk Appliance, you can configure the additional NICs.)
- 4 Click OK, then restart the appliance to reflect the changes.
- 5 (Optional) In the Appliance Administration UI (port 9443) Access Restrictions, specify the IP address of any networks for which you want to allow access to the Service Desk Appliance. Leave this blank to allow any network to access the Service Desk Appliance.
- 6 Click OK.

5.4 Time

- **1** On the Service Desk Appliance home page, in the Appliance Configuration section, click **Time**.
- 2 Change the required time configuration options:
 - **NTP Server:** Specify the NTP server that you want to use for time synchronization. Multiple servers can be specified by providing spaces.
 - Region: Select the region where Service Desk Appliance is located.
 - **Time Zone:** Select the time zone on which Service Desk Appliance is located.
 - Hardware Clock Set to UTC
- 3 Click OK.

5.5 Digital Certificates

The Service Desk Appliance ships with a self-signed digital certificate. Instead of using this selfsigned certificate, you must use a trusted server certificate that is signed by a trusted Certificate Authority (CA) such as VeriSign or Equifax. Also, update your certificate when you update the Service Desk Appliance software.

Perform the following sections to change the digital certificate for your Service Desk Appliance. You can use the digital certificate tool to create your own certificate and then have it signed by a CA, or you can use an existing certificate and key pair.

- Section 5.5.1, "Using the Digital Certificate Tool," on page 18
- Section 5.5.2, "Using an Existing Certificate and Key Pair," on page 19

- Section 5.5.3, "Activating the Certificate," on page 19
- Section 5.5.4, "Managing Certificates," on page 19

5.5.1 Using the Digital Certificate Tool

You can perform the following using this page:

- "Creating a Self-Signed Certificate" on page 18
- "Officially Signing Your Certificate" on page 18

Creating a Self-Signed Certificate

- 1 On the Service Desk Appliance home page, under Appliance Management, click Digital Certificates.
- 2 In the Key Store drop-down list, ensure that Web Application Certificates is selected.
- 3 Click File > New Certificate (Key Pair).
- 4 In the Key Certificate (Key Pair) page, specify the following information:
 - Alias: A name that you want to use to identify and manage certificate.
 - Validity (days): How long you want the certificate to be valid.
 - Key Algorithm: Select RSA or DSA.
 - Key Size: The required key size.
 - Signature Algorithm: The required signature algorithm.
 - Common Name (CN): This must match with the server name in the URL in order for browsers to accept the certificate for SSL communication.
 - Organizational Unit (OU): (Optional) Organizational unit name, such as a department or division.
 - Organization (O): (Optional) Organization name.
 - + City or Locality (L): (Optional) City name.
 - State or Province (ST): (Optional) State or province name.
 - Two-letter Country Code (C): (Optional) Two-letter country code. For example, US
- 5 Click OK to create the certificate.

After certificate is created and self-signed, ensure that the certificate is officially signed. For information, see "Officially Signing Your Certificate" on page 18.

Officially Signing Your Certificate

- 1 On the Digital Certificates page, select the certificate that is created, then click File > Certificate Requests > Generate CSR.
- 2 Share your digital certificate with a certificate authority (CA), such as VeriSign.

The CA accepts your Certificate Signing Request (CSR) and generates an official certificate based on the CSR information. The CA then shares the new certificate and certificate chain.

- 3 After receiving the official certificate and certificate chain:
 - 3a Go to the Appliance Configuration page and click Digital Certificates.
 - **3b** Click File > Import > Trusted Certificate. Browse for the trusted certificate chain that you received from the CA, then click OK.

- **3c** Select the self-signed certificate, then click File > Certification Request > Import CA Reply.
- **3d** Browse for and upload the official certificate to be used to update the certificate information.
- **3e** On the Digital Certificates page, the name in the **Issuer** column for your certificate changes to the name of the CA that stamped your certificate.
- 4 Activate the certificate, for information, see "Activating the Certificate" on page 19.

5.5.2 Using an Existing Certificate and Key Pair

When you are using an existing certificate and key pair, use a . P12 key pair format.

- 1 On the Digital Certificates page, in the Key Store drop-down, select Web Application Certificate.
- 2 Click File > Import > Trusted Certificate. Browse for and select your existing certificate, then click OK.
- 3 Click File > Import > Trusted Certificate. Browse for and select your existing certificate chain for the certificate that you selected in Step 2, then click OK.
- 4 Click File > Import > Key Pair, then browse for and select . P12 key pair file, specify password if required, then click OK.
- 5 Activate the certificate, for information see "Activating the Certificate" on page 19.

5.5.3 Activating the Certificate

- 1 On the Digital Certificates page, in the Key Store drop-down, select Web Application Certificates.
- 2 Select the certificate that you want to activate, click Set as Active, then click Yes.
- 3 Verify that the certificate and the certificate chain were created correctly by selecting the certificate, then clicking View Info.

5.5.4 Managing Certificates

All certificates that are included with the Oracle Java package that is bundled with the version of SLES that Service Desk Appliance ships with, are installed when you install Service Desk Appliance.

You can use the Digital Certificates tool on the Service Desk Appliance to remove certificates that are not used by your organization.

Also, you can use the Digital Certificates tool on the Service Desk Appliance to maintain the certificate store by removing certificates that are expired and then installing new certificates as required, according to your organization's security policies.

To access the Digital tool:

1 On the Service Desk Appliance home page, under Appliance Management, click Digital Certificates.

In the Key Store drop-down, under Web Application Certificates, all certificates are displayed. Based on requirement, you can delete the unused certificates.

IMPORTANT: The active certificate must not be deleted.

5.6 Storage

If you have created hard disk partitions (/vastorage and /var), Service Desk Appliance provides tools that allow you to expand the storage space for the /vastorage and /var partitions.

- 1 On the Service Desk Appliance home page, in the Appliance Configuration section, click **Storage**.
- **2** Use the tools provided by your virtualization platform vendor to expand the virtual disks that contain the partitions your are expanding.
- 3 In the Appliance Disks Containing Unallocated Free Space, select the partitions to be expanded.
- 4 Click Expand partitions.

Appliance services are stopped, the selected partitions are expanded to the size of their respective disks, and appliance services are restarted.

5 Restart the appliance so that the operating system detect the disks that are expanded.

5.7 System Services

List of services that is running on the Service Desk Appliance. The following system services are available:

- SSH
- Memcached

In the System Services page, you can perform the following actions:

- Section 5.7.1, "Starting, Stopping, or Restarting System Services," on page 20
- Section 5.7.2, "Setting System Services to Automatic or Manual," on page 20

5.7.1 Starting, Stopping, or Restarting System Services

1 In the System Services page, select the service that you want to start, stop, or restart.

2 Click Action, then click Start, Stop, or Restart.

5.7.2 Setting System Services to Automatic or Manual

- 1 On the System Services page, select the service that you want to make automatic or manual.
- 2 Click Options, then click Set as Automatic, or Set as Manual.

If you choose **Set as Automatic**, the SSH services will start automatically when you start the appliance.

If you choose **Set as Manual**, you need to start or stop the SSH services manually after you start the appliance.

5.8 Firewall

During the configuration a few ports on appliance are open. You can view the current firewall configuration from the Service Desk Appliance.

1 On the Service Desk Appliance home page, in the Appliance Configuration section, click Firewall.

Port numbers are displayed with the current status.

If you have a firewall, you must allow the listed port numbers to ensure that you have a seamless experience with Service Desk Appliance. As a best practice, do not change any port numbers from the default ports.

5.9 Administrative Passwords

- 1 On the Service Desk Appliance home page, in the Appliance Configuration section, click Administrative Passwords.
- 2 Specify the new passwords for the root and sdadmin administrators.

If you are changing the root password, you must first specify the current root password.

- 3 (Optional) Select or clear Allow root access to SSH. When this option is selected, the root user is able to SSH to the appliance. If this option is not selected, only the nsd user can SSH to the appliance.
- 4 Click OK.

5.10 Online Update

Online Update enables you to update the Appliance.

1 On the Service Desk Appliance home page, in the Appliance Configuration section, click Online Update.

You can perform the following actions:

 Register: Enables you to register with Micro Focus Customer Center (MFCC) server or a Local Subscription Management Tool (SMT) server from where you can download software updates and install automatically to update the product.

To register online update service:

- 1. Click the Register tab.
- Choose the type of service Local SMT (Subscription Management Tool) or Novell Customer Center (NCC).

Based on the service type, specify the following:

Local SMT

- Hostname: The hostname of the server from where you want to download.
- SSL Cert URL (optional): The SSL certificate to communicate with the server.
- Namespace path (optional): The name space of the file or directory.

Novell Customer

• Email: The email address to receive the updates on Service Desk suite.

- Activation key: The activation key for the server base license.
- Allow data send: choose how you want to receive the data Hardware Profile or Optional information.
- 3. Click Register.
- Update Now: After registration, click Update Now to trigger downloaded updates.
- Schedule: After registration, you can configure type of updates to download and whether to automatically agree with the licenses.

To schedule online update:

- 1. Click the Schedule tab.
- 2. Select a schedule for download updates (Manual, Daily, Weekly, Monthly).

IMPORTANT: We recommend that you schedule online updates only for updating noninteractive security patches on ZENworks Service Desk Appliance 7.5 or later. Rest of the patches including upgrade to newer version of Service Desk can be done manually as it impacts the system and might cause down-time of server.

- View Info: Displays the list of installed and downloaded software updates.
- Refresh: Refreshes the status of updates on the Appliance.

5.11 Shutting Down and Restarting Service Desk Appliance

1 On the Service Desk Appliance home page, in the Appliance Configuration section, click Reboot or Shutdown.

This restarts or shuts down Service Desk Appliance.

Service Desk System Management

The user interface helps you to configure and perform operations on a Service Desk Server. Based on the logged-in user the tiles are displayed.

On Service Desk, the root or sdadmin user has all privileges. The sdadmin user is used as a Service Desk administrator to perform day-to-day activities in Service Desk.

The following operations can be performed by root and sdadmin:

- · Explore all the files and folders of the appliance system
- View logs
- · View and edit the Service Desk configuration settings
- Restart both appliance and Service Desk
- · Launch a terminal and execute commands

To manage Service Desk Appliance:

- 1 Launch the URL on a supported web browser to access the Management Console. For example: https://<FQDN>:9443 or https://<ipaddress>:9443
- 2 Specify the login credentials, then click Log in.

If you log in as a root or sdadmin user, the following options are displayed in the Service Desk section:

- Section 6.1, "Service Desk Configuration," on page 23
- Section 6.2, "Terminal and File Explorer," on page 24
- Section 6.3, "Logs," on page 26
- Section 6.4, "Configuring Service Desk," on page 27

6.1 Service Desk Configuration

The Service Desk Configuration page is enabled only after Service Desk is successfully configured.

1 On the Service Desk Appliance home page, in the Service Desk Appliance section, click Service Desk Configuration.

The Service Desk Configuration page has the Summary of database configuration.

The Summary enables you to view the Service Desk Server details. This includes information about the Certificate, Service Desk Database, and Appliance details, such as type of hypervisor used, operating system, RAM and file system and HDD details.

The Appliance comes with built-in 40 GB of <code>rootfs</code> file system that is mounted on root directory. The Additional hard disk that is added will be attached to the <code>/dev/sdb1</code> and mounted on <code>/vastorage</code>. All Service Desk related configurations, log files, certificates, and binaries are stored on the additional hard disk.

2 Click **Database Configuration** to change the password of embedded database or to connect to an external database.

To change the Embedded Database password:

- 2a Choose the Embedded Database.
- **2b** Select Change Password for embedded database, specify the new password and confirm, and then click OK.

or

To use an External Database:

2c Choose External Database and click OK.

2d Go to the Appliance Home page, click Service Desk, and configure the external database.

6.2 Terminal and File Explorer

This tile launches an integrated view for File System Explorer and Terminal.

- Section 6.2.1, "Terminal," on page 24
- Section 6.2.2, "File Explorer," on page 25

6.2.1 Terminal

SSH service needs to be running for terminal to work. SSH service is started by default. If the SSH service is not running, perform the following steps:

- 1 On the Service Desk Appliance home page, in the Appliance Configuration, click the System Services icon.
- 2 Select the SSH service on the System Services page.
- 3 Click Action, then click Start.

Set the SSH service to Automatic, if you want to restart the SSH service automatically after you reboot the device.

4 On the Service Desk Appliance home page, in the Service Desk section, click Terminal & File Explorer.

A new browser window launches two frames that display a **File Explorer** (for performing file operations) and a **Terminal**. Whenever you close the Terminal browser or tab, then a confirmation message is displayed.

If you log in as sdadmin or root user, you can open a terminal session.

You can perform file operations by using an embedded File Explorer that enables you to transfer content between the local and the remote file systems. You can also open new terminals rooted at any folder in the remote file system.

You can launch more than one terminal by clicking **New Terminal**. By default, a maximum of five terminals can be launched.

To configure with any other value than the default value of the terminal:

- 1 Go to /etc/opt/novell/base
- **2** Open the terminal_config.properties file.
- 3 Change the maxTerminalsPerBrowser value with the required value, then save the file.

To select a theme (foreground and background color) for the terminals:

1 Click the Settings 💿 icon, then select the required terminal theme.

To create a theme:

- 1 Go to /etc/opt/novell/base
- 2 Open the terminal-themes.xml file.
- 3 Add your own theme, then save the file. For example:

```
<theme>
        <name>example</name>
        <background-color>#000000</background-color>
        <foreground-color>yellow</foreground-color>
        </theme>
```

6.2.2 File Explorer

1 On the Service Desk Appliance home page, in the Service Desk section, click Terminal & File Explorer.

A new browser window launches two frames that display a File Explorer (for performing file operations) and a Terminal (SSH).

This enables you to perform operations on files and folders.

- The file operations are based on user privileges (POSIX file permissions).
- If you log in as sdadmin, all file operations are executed as sdadmin user.
- If you log in as root, all file operations are executed as root user.
- In the tabular view, a context menu is available with these options: Open Terminal, Refresh, Upload, Delete, and Rename.
- The Tree View for appliance file system displays the appliance file system as a tree. Only folders are displayed in the tree view. The following options are available Open Terminal, Refresh, Cut, Copy, Paste, Delete, Rename, New Folder, Download, and Upload.
- File explorer enables you to explore the Appliance's (SLES -Unix) file system, breadcrumb navigation, upload, download, refresh, rename, create, delete, or, CCP operations (cut, copy, and paste).

lcon	Name	Description
0	Terminal Settings	To change the terminal theme display settings.
6	Select Path	To select file path that is displayed on the breadcrumb.
0	Settings	To configure show or hide files.
Ι	Breadcrumb	Displays the path for selected file or folder.
t	Parent Directory	Display the contents of the parent folder in the tabular view.

Below the file path, a toolbar is displayed and you can perform the following:

lcon	Name	Description
*	Download	To download files and folders under a specified folder.
1	Upload	Supports multiple file upload; folder upload is not supported.
	New folder	Creates a folder in the current folder.
	New file	Creates a new file in the current folder.
0	Refresh	Updates the tabular view with the latest contents from the appliance.
Ħ	Delete	Enables you to delete multiple files and folders under a specified folder.

6.3 Logs

All log files that are monitored on Service Desk Appliance are organized in a virtual tree structure and path of the particular file or folder is displayed. Log files can be viewed in the Tail mode or View From Start mode.

In the Tail mode, a log file is displayed from the end of log file.

In the View From Start mode, a log file is displayed from the start of the log file. Whenever log files span across multiple version of files, then starting from the first version of that file the content is displayed.

1 On the Service Desk Appliance home page, in the Service Desk section, click Logs.

This enables you to view logs of the Service Desk Server. Logs are categorized based on Appliance logs, operating system logs, and Service Desk logs. With-in Service Desk, logs are categorized based on different components.

Logs has the following options:

- View, View From Start, and Refresh
- Download enables you to download a log file or a folder.
- **Resume** and **Pause** enable you to tail log files to see the latest information. You can configure the refresh interval of a tail by specifying the **Refresh** time in **Seconds**. Refresh specifies the interval of time between two requests. By default **Refresh** is set to one second.

Specify Lines to load to control the number of lines to be retrieved for the tail interval. By default Lines to load is set to 100.

Control the speed in which log file is displayed. Log files are loaded by making multiple HTTP requests in periodic intervals of time. Each request loads a configurable number of lines.

- Clear enables you to clear the current displayed logs. However, logs will not be cleared in Service Desk Appliance. To see the cleared logs, start the log file.
- Search enables you to filter logs based on the search criteria. You can use tail and grep to
 monitor log files from the terminal. The log viewer provides a GUI for tailing and filtering the
 content in log files. You can search based on log level such as INFO, ERROR, and DEBUG and
 also with regular expressions (AND and OR).

6.4 Configuring Service Desk

To configure Service Desk:

- 1 On the Service Desk Appliance home page, in the Service Desk Appliance section, click Service Desk.
- 2 On the Service Desk login page, specify the login credentials that you specified during configuration.

By default super/super and admin/admin will be your login credentials.

7

Migrating Service Desk Appliance

This chapter contains information about migrating your existing implementation of Service Desk that runs on the appliance.

If you are using Service Desk as a standalone application, see Chapter 8, "Migrating Service Desk (Standalone)," on page 33.

For migrating information, see the following:

- Section 7.1, "Pre-Migrate," on page 29
- Section 7.2, "Migrating the Service Desk Appliance," on page 30
- Section 7.3, "Post Migrate," on page 30

IMPORTANT

- Service Desk supports no more than two major versions behind the latest release (N-2). Since the latest version is Service Desk 7.5 (N) the 7.4 (N-1) and 7.3 (N-2) versions are also supported.
- From Service Desk 7.5, the directory structure has been changed as follows:
 - Resource directory: /vastorage/LiveTime
 - Application related logs: /vastorage/LiveTime/Logs
 - Service Desk installation location: /opt/novell/servicedesk
 - For logs, see Section 6.3, "Logs," on page 26

7.1 Pre-Migrate

Prior to migrating to Service Desk 7.5, ensure that you perform the following:

- If you are using Custom Banners in Service Desk, then back up the contents from /opt/ novell/nsd/servicedesk/Server/webapps/LiveTime/images/banners/custom folder to an external storage.
- If any configuration is changed in the Tomcat server such as the web.xml and server.xml files, then ensure that you note the changes.
- If any configuration is changed in Java such as the catalina.sh file, then ensure that you note the changes.
- If SSL is configured and you want to use the same certificates, then back up the certificates and keys.
- The network or DNS related configuration will not be migrated. Hence, you need to note the details.
- **IMPORTANT:** Stop Service Desk services in the older appliance before migration.

7.2 Migrating the Service Desk Appliance

Service Desk Appliance will be migrated by bringing the new appliance. The Service Desk configuration and data is transferred to the new appliance which then becomes your production environment.

To migrate the Service Desk Appliance:

- 1 Deploy the Service Desk 7.5 Appliance on a Hypervisor. For information, see *Chapter 3, "Appliance Deployment," on page 11.*
- 2 On the Service Desk Appliance home page, in the Service Desk Appliance section, click Migration.
- 3 On the Migrate Appliance (Service Desk v7.3 and v7.4) page, specify the following information:
 - IP Address: The IP address of your existing Appliance Server.
 - Root Password: The root password for Service Desk Appliance.

IMPORTANT: If you are using an embedded database, ensure that the **Database Server Host** is set to 127.0.0.1.

4 Click Migrate to complete the migration process.

Depending on the data size, the migration time varies.

The migration status message is displayed in Appliance home page.

IMPORTANT: Ensure that you do not perform any configuration changes during migration.

- 5 If migration is successful, power off the existing Appliance Server.
- 6 Connect to Service Desk Appliance 7.5 through a browser.
- 7 Connect to the database:
 - 7a Go to the Appliance Home page, click Service Desk. Service Desk opens in a new browser tab.
 - 7b Click Edit, and then Advanced.
 - 7c Click Upgrade to complete the process.A confirmation message is displayed after upgrade is completed.

7.3 Post Migrate

After you migrate to Service Desk 7.5 Appliance, ensure that you perform the following:

- Restore the Custom Banners at /opt/novell/servicedesk/server/webapps/LiveTime/ images/banners/custom in the Service Desk 7.5 Appliance.
- If you have made any changes in the Tomcat server such as the web.xml and server.xml files, then update the changes.
 - If you have configured SSL, then reconfigure the SSL settings.

To configure SSL, go to the Appliance Configuration and click Digital Certificates.

• If any memory configuration is modified in the catalina.sh file, update the same changes in the "/etc/init.d/servicedesk.server" file. Modifications to the catalina.sh file is no longer required.

• Reconfigure the network or DNS settings.

To configure network settings, go to the Appliance Configuration and click Network.

8

Migrating Service Desk (Standalone)

This chapter contains information about migrating your existing standalone Service Desk.

if you are using Service Desk as an appliance, see Chapter 7, "Migrating Service Desk Appliance," on page 29.

For migrate information, see the following:

- Section 8.1, "Pre-Migrate," on page 33
- Section 8.2, "Migrating to the Service Desk," on page 34
- Section 8.3, "Post Migrate," on page 34

IMPORTANT

 Service Desk supports no more than two major versions behind the latest release (N-2). Since the latest version is Service Desk 7.5 (N) the 7.4 (N-1) and 7.3 (N-2) versions are also supported.

8.1 Pre-Migrate

Prior to migrating to Service Desk 7.5, ensure that you perform the following:

- If you are using Custom Banners in Service Desk, then back up the contents from <installtion>/servicedesk/Server/webapps/LiveTime/images/banners/custom folder to an external storage.
- **IMPORTANT:** Take backup of Service Desk database.
- If any configuration is changed in the Tomcat server such as the web.xml and server.xml files, then ensure that you note the changes.
- If any configuration is changed in Java such as Heap configuration, then ensure that you note the changes.
- If SSL is configured and you want to use the same certificates, then back up the certificates and keys.
- The network or DNS related configuration will not be migrated. Hence, you need to note the details.
- Before powering on the appliance, ensure that a new virtual volume (VAStorage) is added.
- **IMPORTANT:** Stop Service Desk service before migration.

8.2 Migrating to the Service Desk

Service Desk Appliance will be migrated by bringing the new appliance. The Service Desk configuration and data is transferred to the new appliance which then becomes your production environment.

To migrate Service Desk:

- 1 Deploy the Service Desk Appliance on a Hypervisor. For information, see *Chapter 3, "Appliance Deployment," on page 11.*
- 2 **IMPORTANT:** Stop the Service Desk services on the current appliance.
- **3** From the old Service Desk server, copy the LiveTime folder located at <installtion>/ ServiceDesk/ into the current appliance /vastorage folder.
- 4 Start the Service Desk service.
- 5 Connect to Service Desk Appliance 7.5 through a browser.
- 6 Connect to the database:
 - 6a On the Service Desk Appliance home page, in the Service Desk Appliance section, click Service Desk Configuration.
 - 6b Click Database Configuration, choose External Database and then click OK.
 - **6c** Go to the **Appliance Home** page, click **Service Desk**, and configure the external database. The **Application Setup** page is displayed.
- 7 On the Application Setup page, specify the database details.
- 8 Click Test to ensure that the database is connected.
- 9 Click Upgrade to complete the process.

A confirmation message is displayed after upgrade is completed.

10 Power off the old Service Desk server.

8.3 Post Migrate

After you migrate to Service Desk 7.5 Appliance, ensure that you perform the following:

- Restore the Custom Banners at /opt/novell/servicedesk/server/webapps/LiveTime/ images/banners/custom in the Service Desk 7.5 Appliance.
- If you have made any changes in the Tomcat server such as the web.xml and server.xml files, then update the changes.
 - · If you have configured SSL, then reconfigure the SSL settings.

To configure SSL, go to the Appliance Configuration and click Digital Certificates.

- If any memory configuration is modified in the catalina.sh file, update the same changes in the "/etc/init.d/servicedesk.server" file. Modifications to the catalina.sh file is no longer required.
- Reconfigure the network or DNS settings.

To configure network settings, go to the Appliance Configuration and click Network.