

Linux



IBM Electronic Service Agent for PowerLinux User's Guide

Version 3.0

Linux



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Note

Before using this information and the product it supports, read the information in "Notices" on page 109.

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About this document

This book provides the information necessary to install, activate, use, and manage IBM® Electronic Service Agent™ for PowerLinux™.

Note: For the most current information about IBM Electronic Service Agent for PowerLinux, go to the following address:

<http://publib.boulder.ibm.com/infocenter/lxinfo/v3r0m0/topic/liaao/liaaokickoff.htm>

Highlighting

The following highlighting conventions are used in this book:

Bold	Identifies commands, subroutines, keywords, files, structures, directories, and other items whose names are predefined by the system. Also identifies graphical objects such as buttons, labels, and icons that the user selects.
<i>Italics</i>	Identifies parameters whose actual names or values are to be supplied by the user.
Monospace	Identifies examples of specific data values, examples of text similar to what you might see displayed, examples of portions of program code similar to what you might write as a programmer, messages from the system, or information you must actually type.

Case-sensitivity in Linux

Linux operating system is case-sensitive, which means that it distinguishes between uppercase and lowercase letters. For example, you can use the **ls** command to list files. If you type **LS**, the system responds that the command is not found. Likewise, **FILEA**, **FiLea**, and **filea** are three distinct file names, even if they reside in the same directory. To avoid causing undesirable actions, always ensure that you use the correct case.

ISO 9000

ISO 9000 registered quality systems were used in the development and manufacturing of this product.

IBM Electronic Service Agent

IBM Electronic Service Agent, along with the IBM Electronic Support website, make up IBM Electronic Services.

This topic collection provides information about installing, activating, configuring, using, and troubleshooting IBM Electronic Service Agent on PowerLinux servers.

The most current version of this information is in the IBM Knowledge Center for Linux. To access this information, use the following web address:

<http://www-01.ibm.com/support/knowledgecenter/linuxonibm/liaao/liaaokickoff.htm>.

To view or download the PDF version of this topic, select the following link:


IBM Electronic Service Agent for PowerLinux

Downloading Adobe Reader: You need Adobe Reader installed on your system to view or print this PDF. You can download a free copy from the Adobe website (www.adobe.com/products/acrobat/readstep.html).


What's new in IBM Electronic Service Agent 3.0 for PowerLinux

IBM Electronic Service Agent 3.0.0 introduces the following new features:


Little Endian support

With the release of SUSE Linux Enterprise 12, Linux runs in little-endian mode on the POWER8™ architecture. To monitor POWER8 devices, IBM Electronic Service Agent is enhanced to support little-endian mode. For Electronic Service Agent to support little-endian mode, you must install ESA Little Endian package.  Learn more...

Serviceable Event Provider



IBM Serviceable Event Provider is a no-charge software tool that is deployed on your PowerKVM host system to automatically and continuously monitor, track the hardware problems, and send traps to the registered listener.  Learn more...

Monitor PowerKVM hosts

IBM Electronic Service Agent monitors multiple Power® hosts remotely from a PowerLinux server, which is on the same network. The remote system can be a stand-alone PowerLinux or one of the guest partition operating system that is hosted by KVM itself. The ESA is installed on this PowerLinux system and the KVM hosts can be added to it as endpoints. ESA listens to the SNMP traps that are sent by the IBM Serviceable Event Provider. The IBM Serviceable Event Provider is installed on PowerKVM systems and Electronic Service Agent initiates the remote communication to the endpoints (PowerKVM systems) to retrieve additional information.  Learn more...

User Interface modifications

The following new features of IBM Electronic Service Agent are developed for an enhanced user experience, while maintaining the existing UI panes as is:

- **All Systems:** The **All Systems** pane displays all the systems that are discovered by the IBM Electronic Service Agent.  Learn more...
- **All Problems:** The **All Problems** pane displays all the problems (service requests) for systems that are monitored by IBM Electronic Service Agent. Learn more...
- **Discovery:** The **Discovery** pane allows you to configure or discover multiple KVM hosts on which Serviceable Event Provider is installed. The **Discovery** pane also displays the discovery log history.  Learn more...

IBM Electronic Service Agent overview

IBM Electronic Service Agent is a no-charge software tool that resides on your system to automatically and continuously monitor, collect, and submit hardware problem information to the IBM Electronic Support website. IBM Electronic Service Agent can also routinely collect and submit hardware, software, performance, and system configuration information, which might help IBM Support in diagnosing problems.

IBM Support representatives use system problem descriptions and service information to better diagnose issues with your systems. With early knowledge about potential problems that IBM Electronic Service Agent provides, IBM can proactively assist you in achieving higher availability and better performance.

IBM Electronic Service Agent does the following tasks for the PowerKVM hosts:

- Subscribes to the SNMP traps and listens the SNMP traps from IBM Serviceable Event Provider for the registered KVM hosts.
- Places service requests to IBM automatically if the server is under a service agreement or warranty.
- Collects and securely sends scheduled system and diagnostic inventory to an IBM database. This inventory information is available to IBM Support representatives when they are solving your problem.
- Communicates with IBM using a secure Internet connection using encryption and authentication.
- Includes the option to send email notifications when a serviceable problem is detected and service request is opened.

Accessing the IBM Electronic Support portal

The IBM Electronic Support portal enables you to view service information reported by IBM Electronic Service Agent, search all content using advanced search capabilities, open and manage service requests, receive support content notifications by platform or individual product, and view call home problem events.

You can access the IBM Electronic Support portal at the following web addresses:

- <http://support.ibm.com>: A portfolio of tools and resources to keep your systems, software, and applications running smoothly.
- <http://www-01.ibm.com/support/electronicssupport/>: The support portal to view contracts, inventory, heartbeat, etc of your systems.

Note: To use some of the functions that are found on the IBM Electronic Support portal, such as viewing service information or call home events, you must provide an IBM ID.

Related tasks:

“Providing IBM IDs” on page 40

An IBM ID is needed to view service information that was sent to the IBM Electronic Support website by IBM Electronic Service Agent. Service information can be viewed on the IBM Electronic Support website.

Problem processing overview

Problem processing is an important capability of IBM Electronic Service Agent. When IBM Electronic Service Agent detects a problem, there is a specific sequence of events that occur to record the problem, report the problem, resolve the problem, and close the problem.

The following shows the problem processing sequence of events, with references to procedures, settings, and information to help you manage those events.

1. IBM Electronic Service Agent detects and records a problem. To see all problems that are recorded by IBM Electronic Service Agent, see “Displaying problem information” on page 30.
2. IBM Electronic Service Agent reports the problem to the IBM.
3. IBM Electronic Service Agent sends service information that is related to the problem to the IBM Electronic Support website. Service information includes hardware, software, system configuration, and performance information.
To view the service information sent to the IBM Electronic Support website, go to the IBM Electronic Support website and select My systems. See “Accessing the IBM Electronic Support portal” on page 2.
4. The IBM Electronic Support website receives the problem and service information. IBM Support contacts the person that is specified as the service contact. For more information about specifying the service contact, see “Specifying service contact information” on page 22. When contacting the service contact, IBM Support either arranges an appointment to replace the part, or, if possible, attempts to resolve the problem without a visit to the customer's site.
5. After the problem is resolved, the service request is closed by IBM Support. For information about verifying that a service request assigned to a problem is closed, see “Displaying problem information” on page 30.

Related concepts:

“Accessing the IBM Electronic Support portal” on page 2

The IBM Electronic Support portal enables you to view service information reported by IBM Electronic Service Agent, search all content using advanced search capabilities, open and manage service requests, receive support content notifications by platform or individual product, and view call home problem events.

Related tasks:

“Displaying problem information” on page 30

The **All Problems** pane displays all the problems (service requests) for systems that are monitored by IBM Electronic Service Agent.

“Configuring problem reporting” on page 45

You can specify that IBM Electronic Service Agent continue to attempt to report a problem if initial transmission fails. You can also configure the frequency and number of times IBM Electronic Service Agent attempts to report a problem.

“Configuring your service connection” on page 18

IBM Electronic Service Agent can connect to the IBM Electronic Support website through direct Internet (HTTPS) connection, service and support proxy, or HTTP proxy connection paths. IBM Electronic Service Agent uses these connection paths to report problems and send service information to the IBM Electronic Support website. IBM Electronic Service Agent uses IPv4 to connect to the IBM Electronic Support website.

“Specifying service contact information” on page 22

Specifying IBM Electronic Service Agent service contact information is the first step in preparing to connect to the IBM Electronic Support website.

Planning for IBM Electronic Service Agent

When planning for IBM Electronic Service Agent, you need to consider the operating system, browsers, security, and topology of the network you plan to support.

Operating systems for IBM Electronic Service Agent

IBM Electronic Service Agent for PowerLinux is included in the IBM Installation Toolkit for PowerLinux.

IBM Electronic Service Agent for PowerLinux is supported on the following operating systems:

- Red Hat Enterprise Linux Version 6.0 or higher
- SUSE Linux Enterprise Server Version 11.0 or higher

Note: IBM Electronic Service Agent is not supported on any version of Ubuntu Linux operating system.

IBM Electronic Service Agent for PowerLinux Little-Endian mode is supported only on the SUSE Linux Enterprise Server Version 12.0 or higher.

Browsers for IBM Electronic Service Agent

It is recommended that you use one of the following browser to run the IBM Electronic Service Agent graphical user interface.

Browsers used as the IBM Electronic Service Agent graphical user interface might be on systems running different operating systems. Although other browsers might work when viewing the Electronic Service Agent graphical user interface, the following browsers are supported on the indicated operating systems:

- Mozilla 1.4.2 and 1.7.12 and later for use on AIX[®] operating systems
- Mozilla 1.7 and later for use on Red Hat Enterprise Linux (RHEL) and SUSE Linux operating systems
- Firefox v8.0 and later for use on Red Hat Enterprise Linux (RHEL) and SUSE Linux operating systems
- Microsoft Windows Internet Explorer 8 and later for use on Microsoft Windows operating system
- Firefox v10.0 and later for use on Microsoft Windows operating system

Security

When using IBM Electronic Service Agent, your information is kept private and your data is securely transmitted to IBM.

The following provides more information about the privacy of your information, the security of information you transmit to the IBM Electronic Support website, and the security of those using IBM Electronic Service Agent.

Information privacy

The service information you provide to the IBM Electronic Support website remains private. Only authorized IBM Support personnel and those people specifically authorized by you have access to this information.

The service information that is gathered by the IBM Electronic Support website is collected from the information you entered into IBM Electronic Service Agent and the information IBM Electronic Service Agent collected from the system. It is also gathered from phone calls with the IBM Support Center, pre-sales specialists, administrative clerks, and other groups within IBM. These IBM groups have electronic access to the information so that they can prepare for and perform advanced problem determination to more efficiently serve you.

The service information collected by IBM Electronic Service Agent includes the following:

- Your support contact information, including names, phone numbers, and email addresses.
- Location information about the system on which IBM Electronic Service Agent is installed, including city, geographic region, country, building, and the phone number for the telephone that is located nearest the system.
- System failure logs, part numbers, feature codes for parts, part serial numbers, part locations, software listing, operating system applications, program temporary fixes (PTFs), the maintenance level, firmware levels, configuration values, system utilization, and performance.

Authorized IBM employees can view all service information about the system. Service information does not include the following:

- Collection or transmission of any of your company's financial, statistical, or personnel information
- Client information
- Your business plans

In addition, IBM Electronic Service Agent might provide a call-home mechanism for other IBM offerings. The call-home mechanism sends information specific to a particular IBM offering. The information that is collected by such offerings is covered in a separate agreement for each IBM offering.

Information transmission security

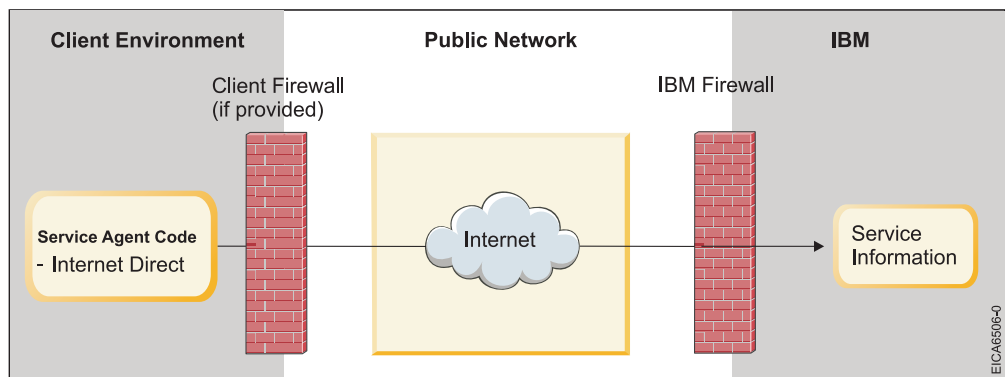
The problem information and service information you send to the IBM Electronic Support website is safe and secure.

IBM Electronic Service Agent can collect problem and service information and send it to the IBM Electronic Support website on a scheduled basis. IBM Electronic Service Agent transactions are outbound requests sent using the security of Hypertext Transfer Protocol Secure (HTTPS). These connection requests are always initiated from the customer system by IBM Electronic Service Agent. IBM Electronic Service Agent can accept incoming connections from the activator command that is used to activate the product, from the **esacli** command, and from the IBM Electronic Service Agent graphical user interface. Both the activator and **esacli** commands are run only locally on the client system. The graphical user interface connection is initiated by the client only. In all three cases, only users

with superuser privileges can run the commands that establish the connections, and the connections are secured, encrypted, and completely within the client local area network.

IBM Electronic Service Agent initiates a connection with the IBM Electronic Support website and then the IBM Electronic Support website replies. The IBM Electronic Support website never initiates a connection to IBM Electronic Service Agent. During the activation and setup of IBM Electronic Service Agent, you select how IBM Electronic Service Agent communications are set up. By default, communication configuration is a direct Internet connection. You can select to keep the default, or specify to transmit information using the IBM Electronic Service Agent proxy server or another proxy server. IBM Electronic Service Agent uses the client's connectivity environment, including any firewalls that the client has established.

The following figure shows a summary of the connection into IBM. The nature of maintaining a high-level security posture dictates that IBM does not divulge in-depth details regarding the management of security or its tools, processes, and audits.



Information transmission security is important whether your connection to IBM is through a direct or proxy connection.

Internet transmission of service information

Note: The Internet provider relationship and connection are the responsibility of the client.

If you select the Internet path to send your information, then the following process applies:

1. At the scheduled time, IBM Electronic Service Agent collects the information to be transmitted and queues it for transmission.
2. IBM Electronic Service Agent establishes an SSL Internet connection with the IBM Electronic Support website using the system ID and password previously created.
3. The collected information is sent to the IBM Electronic Support website.
4. After the arrival at the IBM Electronic Support website, the information is transferred to the appropriate IBM database.

Proxy transmission of service information

The proxy can be either a client supplied HTTP proxy or the IBM Service and Support Proxy. The proxy resides on a client system.

Note: The client supplied HTTP proxy is the responsibility of the client.

If you select the proxy path to send your information, then the following process applies:

1. At the scheduled time, IBM Electronic Service Agent collects the information to be transmitted and queues it for transmission.
2. Using the SSL connection between the system and the IBM Electronic Support website, IBM Electronic Service Agent establishes an SSL Internet connection between the proxy and the IBM Electronic Support website. This connection is authenticated using the system ID and password previously created.
3. IBM Electronic Service Agent sends the collected information through the proxy to the IBM Electronic Support website.
4. After the information arrives at the IBM Electronic Support website, the information is transferred to the appropriate IBM database.

IP Addresses

The following are the list of IP Addresses that are verified to report a problem to IBM from IBM Electronic Service Agent:

Domain name	IP Address	Port
www6.software.ibm.com	170.225.15.41	443
www.ecurep.ibm.com	192.109.81.20	443
eccgw01.boulder.ibm.com	207.25.252.197	443
eccgw02.rochester.ibm.com	129.42.160.51	443
www-945.ibm.com	129.42.26.224	443
www-945.ibm.com	129.42.34.224	443
www-945.ibm.com	129.42.42.224	443
www.ibm.com	129.42.56.216	443
www.ibm.com	129.42.58.216	443
www.ibm.com	129.42.60.216	443
www-03.ibm.com	204.146.30.17	443
www.ibm.com	129.42.56.216	80
www.ibm.com	129.42.58.216	80
www.ibm.com	129.42.60.216	80
www-03.ibm.com	204.146.30.17	80

Ports: The following are the default ports that are used by IBM Electronic Service Agent:

Port number	Description
5024	Port number at which the Electronic Service Agent graphical user interface is accessible through the HTTPS protocol.
5026 Note: It is an optional setup.	Port number at which the Service Proxy is configured as an ECC service proxy.
5028 Note: It is new in Electronic Service Agent 3.0	Port number at which the firewall that must be opened for UDP traffic to receive SNMP Traps.

User security

User and file security is provided by Linux user authorizations and privileges. Users in the Linux root group that can remotely log in to the system can use their user IDs and passwords to log in to the IBM Electronic Service Agent graphical user interface.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

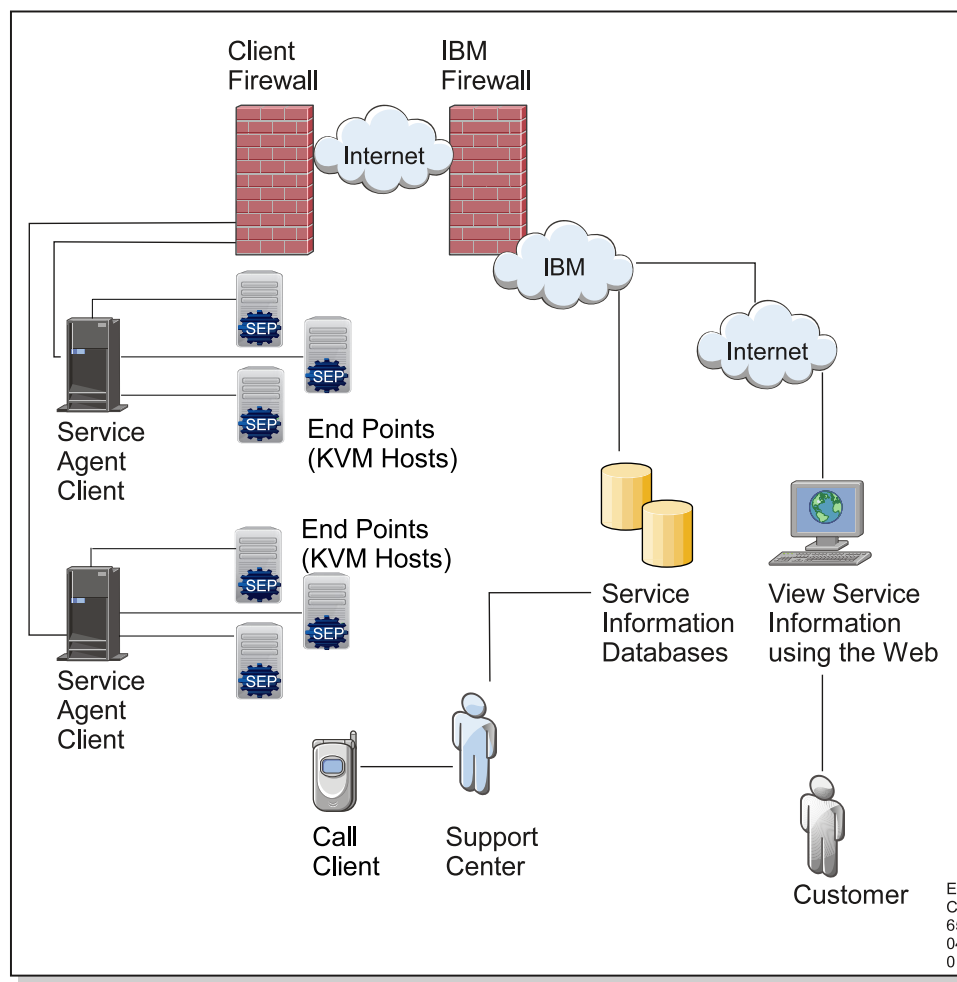
Topology

Ensure that you consider your topology when planning for IBM Electronic Service Agent.

Your topology might consist of stand-alone IBM Electronic Service Agent clients independently connecting to the IBM Electronic Support website or IBM Electronic Service Agent clients connecting to the IBM Electronic Support website through a common exit point.

Stand-alone client topology

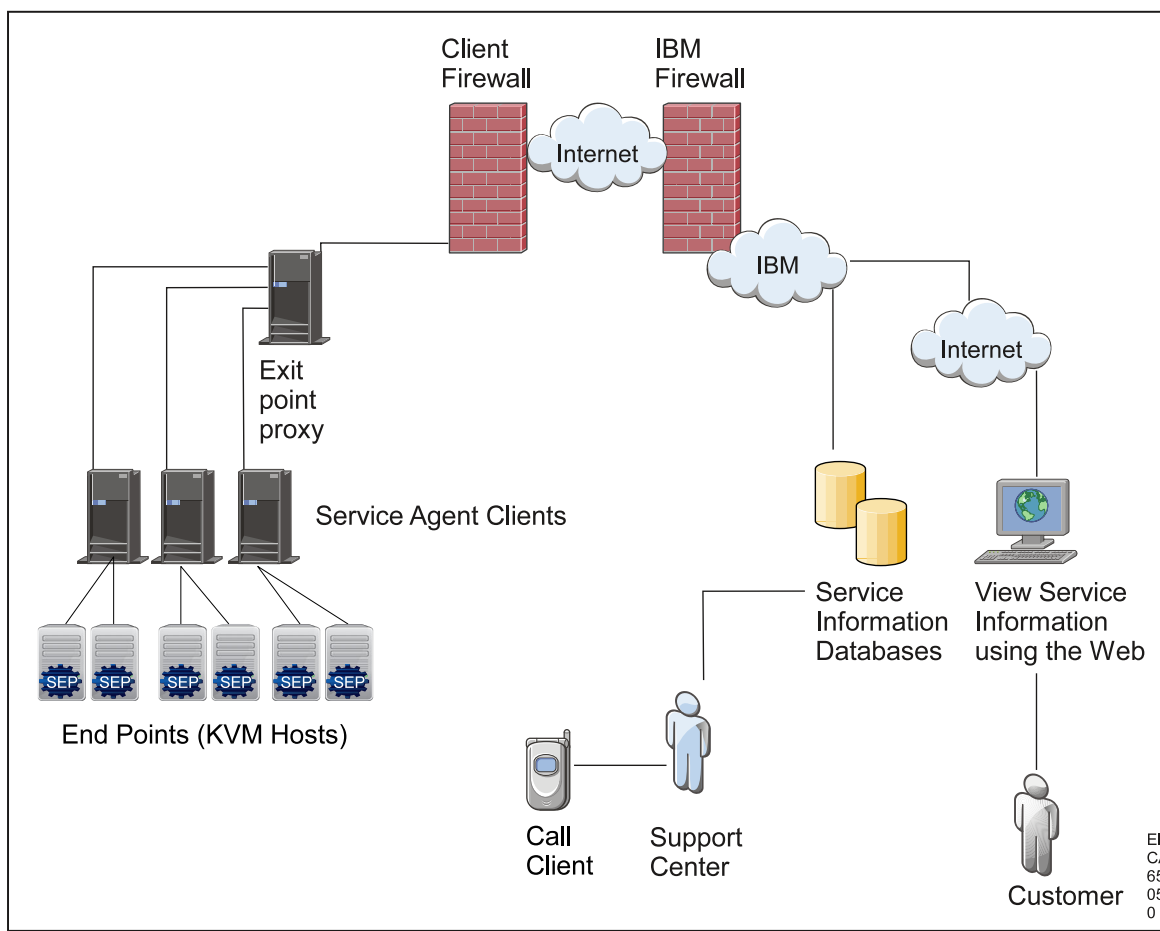
1. The Service Agent client gathers the information from the KVM hosts through SSH and transmits it to the IBM Electronic Support portal.
2. The information is transmitted to the IBM Electronic Support portal in one of the following ways:
 - Through an Internet connection to the IBM Electronic Support portal. Information is protected using existing client firewalls and the IBM firewall.
 - Through a proxy. The proxy can be either a client supplied HTTP proxy or the IBM Service and Support Proxy. Information is protected using existing client firewalls and the IBM firewall.
3. The information is stored in problem management databases and service information databases and made available to the IBM Support Center and service representative to help them assist you in diagnosing problems



Common exit point topology

The common exit point topology consists of IBM Electronic Service Agent clients connecting through a proxy to the service and support facilities of IBM. The proxy can be either a client supplied HTTP proxy or the IBM Service and Support Proxy. Information is protected using existing client firewalls and the IBM firewall. In the following diagram, the information transmission proceeds as follows:

1. Each IBM Electronic Service Agent client gathers the information from the registered KVM hosts for that particular client.
2. Each client transmits the information to the IBM Electronic Support portal through the exit point proxy.
3. The IBM Electronic Service Agent exit point transmits the information to the IBM Electronic Support portal through the proxy.
4. The information is stored in problem management databases and service information databases and made available to the IBM Support Center and service representative to help them assist you in diagnosing problems.



Related tasks:

“Configuring your service connection” on page 18

IBM Electronic Service Agent can connect to the IBM Electronic Support website through direct Internet (HTTPS) connection, service and support proxy, or HTTP proxy connection paths. IBM Electronic Service Agent uses these connection paths to report problems and send service information to the IBM Electronic Support website. IBM Electronic Service Agent uses IPv4 to connect to the IBM Electronic Support website.

Using IBM Electronic Service Agent in an environment with other operating systems

If the system running IBM Electronic Service Agent is in an environment with other operating systems, there are things to consider when using IBM Electronic Service Agent.

IBM Electronic Service Agent is operating system specific. Each operating system needs its own compatible version of IBM Electronic Service Agent.

To access the IBM Electronic Service Agent user guides for different operating systems, go to the IBM Electronic Support portal.

Related information:

 Accessing the IBM Electronic Support Portal

The IBM Electronic Support portal enables you to view service information reported by IBM Electronic Service Agent, search all content using advanced search capabilities, open and manage service requests, receive support content notifications by platform or individual product, and view call home problem events.

Installing IBM Electronic Service Agent

You must install IBM Electronic Service Agent to enable problem detection, reporting, and transmission of service information to the IBM Electronic Support website.

Before you begin

IBM Electronic Service Agent for PowerLinux is provided with IBM Installation Toolkit for PowerLinux, a collection of software that is provided by IBM for PowerLinux users. You can download the IBM Installation Toolkit for big-endian mode from the following website:

<http://www14.software.ibm.com/webapp/set2/sas/f/lopdiags/installtools/>

You can configure the IBM PowerLinux Tools Repository for little-endian mode from the following website:

<http://www-304.ibm.com/webapp/set2/sas/f/lopdiags/yum.html>

The software is provided in the common RPM format, and this document is included with the software.

In addition, IBM Electronic Service Agent requires the following products:

- IBM Java™, version 1.6
- The open source Power Linux diagnostics package **ppc64-diag**

Both of these products, along with their prerequisites, are available with the IBM Installation Toolkit for PowerLinux.

Common Information Model (CIM)

An additional optional software capability is recommended because it enables IBM Electronic Service Agent to gather hardware and software inventory information. A Common Information Model (CIM) provider package provides detailed inventory information that assists IBM in diagnosing serviceable hardware events and configuration problems.

One package that includes CIM is the **IBM Systems Director Platform Agent for Linux on Power**, which can be downloaded from the IBM Systems Director website:

<http://www.ibm.com/systems/software/director/downloads/agents.html>

Alternatively, you can choose to obtain the open source CIM provider **OpenPegasus** from the <http://openpegasus.org> website and construct the provider directly. Detailed instructions for download, construction, installation, and configuration of OpenPegasus are available from this source.

Tip: Both Red Hat Enterprise Linux (RHEL) and SUSE Linux Enterprise Server (SLES) provide utilities that simplify installation of a software package with prerequisites. For RHEL, the **yum** utility installs the prerequisites of a software package before attempting to install the package itself. For SLES, the **zypper** utility provides a similar capability. You can use **yum** or **zypper** utilities to install IBM Electronic Service Agent.

Uninstalling previous versions of IBM Electronic Service Agent

You must uninstall previous 1.x versions of IBM Electronic Service Agent before installing a new version. For the 2.x versions of IBM Electronic Service Agent, you can directly upgrade to IBM Electronic Service Agent 3.0.

To determine whether a version of IBM Electronic Service Agent is already installed on a system, enter the following command:

```
rpm -qa | grep -i esagent
```

- If no information is returned, then IBM Electronic Service Agent is not installed.
- If information is returned, then IBM Electronic Service Agent is installed and must be uninstalled before installing the new version.

For information about uninstalling IBM Electronic Service Agent, see “Uninstalling IBM Electronic Service Agent” on page 62.

To upgrade to IBM Electronic Service Agent 3.0, enter the command:

```
rpm -Uvh esagent.pLinux-3.0.0-0.ppc.rpm
```

About this task

To install IBM Electronic Service Agent, follow these steps:

1. Go to the directory that contains the IBM Electronic Service Agent installation file.
2. Use your normal installation process to install IBM Electronic Service Agent. The IBM Electronic Service Agent fileset is `esagent.pLinux-<version>.ppc.rpm` where *version* is the IBM Electronic Service Agent version.
3. Enter the RPM installation command:

```
rpm -i esagent.pLinux-3.0.0-0.ppc.rpm
```

IBM Electronic Service Agent 3.0.0 is bi-endian, supporting both big-endian and little-endian modes. For ESA to support little-endian mode, you must install IBM Electronic Service Agent package through the following steps:

1. Go to the directory that contains the IBM Electronic Service Agent installation file.
2. Use your normal installation process to install IBM Electronic Service Agent. The IBM Electronic Service Agent fileset is `esagent.pLinux-<version>.ppc64le.rpm` where *version* is the IBM Electronic Service Agent version.

Note: PPC64LE stands for Power PC 64 Little Endian, indicating that a 64 bit kernel is running in little-endian mode on IBM’s Power Architecture.

3. Enter the RPM installation command:

```
rpm -i esagent.pLinux-3.0.0-0.ppc64le.rpm
```

What to do next

When the installation is complete, you must activate and configure IBM Electronic Service Agent to enable it to report problems and transmit service information to the IBM Electronic Support website. For information, see “Activating and configuring IBM Electronic Service Agent.”

Related concepts:

“Activating and configuring IBM Electronic Service Agent”

After installing IBM Electronic Service Agent, you must activate and configure IBM Electronic Service Agent.

“Uninstalling IBM Electronic Service Agent” on page 62

Before you uninstall IBM Electronic Service Agent, determine whether you want to save the configuration information to use for another system or later on this system.

Activating and configuring IBM Electronic Service Agent

After installing IBM Electronic Service Agent, you must activate and configure IBM Electronic Service Agent.

Activating and configuring IBM Electronic Service Agent consists of the following:

1. Using an activation wizard or command to activate IBM Electronic Service Agent.
2. Configuring the service connection to IBM so that IBM Electronic Service Agent can report problems and send service information.
3. Testing the service connection to IBM.
4. Specifying contact and location information so that IBM Support representatives know the location of the system that is running IBM Electronic Service Agent and who to contact about a problem sent to the IBM Electronic Support website by IBM Electronic Service Agent.

There are two mechanisms available for activating IBM Electronic Service Agent: command activation and wizard activation. If you have many systems to activate or there is little or no variation from one system to the next, it is easy to develop a script to activate IBM Electronic Service Agent. If you have few systems to activate or if there are many variations in configuration details, there is an interactive activation wizard available through the IBM Electronic Service Agent graphical user interface.

Using the activation wizard

If you have few systems to activate or if there are many variations in configuration details, use the interactive activation wizard that is available through the IBM Electronic Service Agent graphical user interface.

Before you begin

Before using the activation wizard, run the following command:

```
/opt/ibm/esa/bin/activator -C [-p port] [-w] [-Y]
```

where the **-C** (capital C) command line option activates IBM Electronic Service Agent but defers configuration until later.

In addition, there are three optional parameters.

-p *port* The default communication port used by the IBM Electronic Service Agent graphical user interface is **5024**, however, you can replace *port* with any unused port between **1025** and **65535**, inclusive.

-w Many Linux servers have an active firewall that blocks communication with other systems in the network. You can specify this option to enable remote access to the IBM Electronic Service Agent communication port.

Note: If you want to configure IBM Electronic Service Agent from a location other than the console of the server on which IBM Electronic Service Agent is installed such as a workstation in another room, you must specify the **-w** option on the **activator** command to allow remote access to the IBM Electronic Service Agent graphical user interface.

-Y This option specifies your acceptance of the IBM license agreement (LA) for IBM Electronic Service Agent.

By default, the license agreement is displayed when you specify the **-C** option, and you can choose whether to accept or reject the license agreement. You must accept the license agreement before activation will proceed; activation will not proceed if you reject the license agreement. Specifying the **-Y** option skips the interactive review and acceptance of the license agreement.

Note: To view the license agreement at any time, enter the following command:

```
/opt/ibm/esa/bin/reviewLA
```

About this task

After you run the **activator -C** command, you can use the IBM Electronic Service Agent activation wizard to interactively complete the activation and configuration. To use the wizard to configure IBM Electronic Service Agent, follow these steps:

Procedure

1. Open a browser and enter this web address:

```
https://hostname:5024/esa
```

where *hostname* is the fully qualified name or IP address of the system that runs IBM Electronic Service Agent.

Note: Port 5024 is the default port. If you activated IBM Electronic Service Agent on a different port, use that port number in the web address.

2. On the Welcome pane, log in to the IBM Electronic Service Agent graphical user interface. Any user in the **root** group can log in to the graphical user interface.
3. On the Welcome pane, click **Activate ESA**. The Electronic Service Agent Activation wizard displays.

Note: Unless you activate ESA, all other options of the left navigation on the Welcome pane are disabled and you cannot use them.

4. On the Introduction panel, click **Next**.
5. On the Contact information panel, specify the information that you want IBM Service to use when arranging a service appointment. The person whose contact information you specify must be able to arrange physical access to the system when service is required.

6. On the Location information panel, specify the physical location of the system. The IBM Service Engineer will visit this location to service the system.
7. On the SMTP panel, specify whether you want to be notified when IBM Electronic Service Agent opens a service request with IBM. Use this panel to configure a connection to an email server (SMTP) that will forward an email notification to the email address that you specified on the Contact information panel. The username and password on this panel might be required for authentication with the SMTP server.
8. On the IBM ID panel, specify the IBM ID that is registered for this system. This IBM ID is required to access information about the system. You can use the link on this panel to register for a free IBM ID. You can also specify an alternate IBM ID with similar access to the system.
9. On the Connectivity panel, specify whether the system you are activating will connect directly to the internet or will connect through a proxy server or firewall. The default configuration is a direct connection. A proxy connection requires additional configuration.
10. On the Proxy panel, specify an address and port for the proxy server. You may also need to specify a username and password for network authentication.
11. On the Test panel, you can specify the tests that IBM Electronic Service Agent runs during this configuration.
12. On the Summary panel, verify the information that you specified for activating IBM Electronic Service Agent. Click **Back** to make changes and click **Activate** when you are satisfied with the configuration. The Results panel displays the outcome of the activation process.
13. When you are done viewing the results, click **Finish**. The IBM Electronic Service Agent is activated and all the options on the left navigation are enabled.

Results

Once you activate IBM Electronic Service Agent on this system, you can no longer see the **Activate ESA** option and you cannot use the Activation Wizard. However, you can use either the graphical user interface or the command line interface to both use and manage IBM Electronic Service Agent.

Related concepts:

“Managing IBM Electronic Service Agent” on page 42

You can configure and manage IBM Electronic Service Agent. This includes modifying the configuration and specifying how IBM Electronic Service Agent monitors and collects problem information, and sends service information to IBM.

“Using IBM Electronic Service Agent” on page 25

You can check whether IBM Electronic Service Agent is monitoring the status of your system, view problem information and activity, export and import a configuration, and manage who is authorized to view the information that is sent to the IBM Electronic Support website.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux
command-line prompt.

Using the activator command

If you have many systems to activate and configure or there is little or no variation from one system to the next, it is easy to develop a script to activate and configure IBM Electronic Service Agent.

About this task

You can activate and configure IBM Electronic Service Agent with a non-interactive operation executed as a command in a shell or in a script. This activation script enables you to automate activation and configuration of IBM Electronic Service Agent. For this method of activation and configuration, one command contains all the configuration parameters used to define the contact and location for the machine.

Most of the parameters used to configure IBM Electronic Service Agent from the command line are necessary to supply contact and location information to the IBM Electronic Support website, and are therefore required. Enclose parameter arguments in quotation marks, such as ‘United States’ or “Great Britain”. Options and operands that are enclosed in brackets ([]), such as [-w] or [-Y], are optional. For more information about reading syntax diagrams, see “How to read syntax diagrams” on page 107.

To activate and configure IBM Electronic Service Agent, run the following command:

```
/opt/ibm/esa/bin/activator -c -m company -n contact name -e contact mail  
-t contact phone -g contact country -s system phone -u system country  
-r system address -y system city -a system state -z system postal code  
-b system building -i IBM ID -p port [-w] [-Y]
```

-c Specifies that activation and configuration are performed immediately.

-m {*company*}
Specifies the name of the company that owns or is responsible for the system.

-n {*contact name*}
Specifies the name of the person in the company that is responsible for the system.

-e {*contact mail*}
Specifies the email address for the contact person.

-t {*contact phone*}
Specifies the telephone number where the contact person can be reached. A valid telephone number can contain alphanumeric characters and must include at least 5 but not more than 30 characters. Valid United States or Canada telephone numbers must contain at least 10 but not more than 30 characters and must not contain any dashes.

-g {*contact country*}
Specifies the name of the region or country where the contact person is located. The country must be specified as a valid two-letter code as defined by ISO-3166.

- s *{system phone}*
Specifies the telephone number where the system is located. A valid phone number must include at least 5 but not more than 30 characters. A valid telephone number can contain alphanumeric characters and must include at least 5 but not more than 30 characters. Valid United States or Canada telephone numbers must contain at least 10 but not more than 30 characters and must not contain any dashes.
- u *{system country}*
Specifies the name of the region or country where the system is located. The country must be specified as a valid two-letter code as defined by ISO-3166.
- r *{system address}*
Specifies the address where the system is located.
- y *{system city}*
Specifies the name of the city where the system is located.
- a *{system state}*
Specifies the state or province where the system is located. The state or province must be specified as a valid code as defined by ISO-3166.
- z *{system postal code}*
Specifies the postal code where the system is located.
- b *{system building}*
Specifies the building, floor, and office where the system is located.
- i *{IBM ID}*
Specifies the IBM ID to associate with the system.
- p *{port}*
Specifies the port number on which the subsystem listens for incoming client requests.
- w Specifies to add firewall rules that are required to access IBM Electronic Service Agent from remote systems.
- Y Specifies acceptance of the license agreement so the license agreement is not displayed.

Note: To view the license agreement at any time, enter the following command:

```
/opt/ibm/esa/bin/reviewLA
```

Results

To display and verify the contact and location settings, enter the following command:

```
/opt/ibm/esa/bin/activator -d
```

The contact settings are displayed as a set of values that are separated by colon characters (:). For example (with line breaks added for clarity):

```
# /opt/ibm/esa/bin/activator -d
#company:name:email:country:tele_number:\
system_tele_number:system_country:system_address:system_city:\
system_state:system_zip:system_building:port
```

```
My Company:Bill Blue:billblue@mycompany.com:UNITED STATES:8005551212:\
5034421234:UNITED STATES:100 SW Blue Street:Beaverton:OR:97006:\
Bldg 2, 3rd floor, corner lab:5024
```

You can change the configuration by using the IBM Electronic Service Agent graphical user interface.

Tip: You can also use the **esacli contactSettings** and **esacli locationSettings** commands to change the configuration settings.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

“Specifying service contact information” on page 22

Specifying IBM Electronic Service Agent service contact information is the first step in preparing to connect to the IBM Electronic Support website.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

“esacli contactSettings” on page 71

Use the **esacli contactSettings** command to configure the service contact information.

Configuring your service connection

IBM Electronic Service Agent can connect to the IBM Electronic Support website through direct Internet (HTTPS) connection, service and support proxy, or HTTP proxy connection paths. IBM Electronic Service Agent uses these connection paths to report problems and send service information to the IBM Electronic Support website. IBM Electronic Service Agent uses IPv4 to connect to the IBM Electronic Support website.

About this task

If you use only a default direct Internet connection, no additional configuration is needed. However, if a direct connection is not always available, you can configure IBM Electronic Service Agent to communicate with IBM using a proxy server. In fact, you can specify up to three proxy servers. IBM Electronic Service Agent uses the connections in the order they appear, so if one service connection is not configured, busy, or unavailable, the next service connection is used.

You can use the IBM Electronic Service Agent graphical user interface to configure your service connection.

Tip: You can also use the **esacli connectionSettings** command to configure your service connection. For information, see “esacli connectionSettings” on page 68.

To configure your service connection using the graphical user interface, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Connectivity**.
4. Select the type of connectivity you want to create or change.
 - **Direct connect**

Connecting IBM Electronic Service Agent to the IBM Electronic Support website through a direct HTTPS Internet connection is fast and efficient. This is the default configuration.
 - **Proxy**

Connecting IBM Electronic Service Agent through the IBM Service and Support proxy or your HTTP proxy can be fast and easy from your business network, and minimizes the number of systems that are directly connected to the Internet.

If you decide to use the IBM Service and Support proxy, it should be created on an exit point system. See “Common exit point topology” on page 9 for information about using an exit point for IBM Electronic Service Agent. Then go to “Creating the IBM Service and Support proxy” on page 20 before specifying the proxy connection type.
5. To specify a proxy connection type, follow these steps:
 - a. In the **IP address or host name** field, enter the IP address of the proxy server through which you want this system to connect.
 - b. In the **Port** field, enter the port number on which the proxy server accepts connections.
 - c. In the **Destination user** field, enter the user ID to use if the proxy server requires authentication.
 - d. In the **Destination password** and **Verify password** fields, enter the password to use if the proxy server requires authentication.
 - e. Optionally, click **Test** to test the connection before adding it to the service configuration.
 - f. Click **Add** to create or change the service configuration. IBM Electronic Service Agent uses the connections in the order they appear, so if one service connection is not configured, busy, or unavailable, the next service connection is used.
 - g. To change the order of the connections, select a connection and click **Move up** or **Move down** until the connections are in the desired order.
6. When you are satisfied with the connection definitions and order, click **Apply** or **OK** to save the configuration.

Related concepts:

“Topology” on page 8

Ensure that you consider your topology when planning for IBM Electronic Service Agent.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

“Creating the IBM Service and Support proxy”

IBM Electronic Service Agent can function as a proxy server for other IBM Electronic Service Agent systems or partitions. This enables you to use another IBM Electronic Service Agent server with valid connectivity to IBM instead of a third-party proxy server. You can use IBM Electronic Service Agent graphical user interface to create the IBM Service and support proxy as your connection to the IBM Electronic Support website.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli connectionSettings” on page 68

Use the **esacli connectionSettings** command to set and display information about the connections to IBM.

Creating the IBM Service and Support proxy

IBM Electronic Service Agent can function as a proxy server for other IBM Electronic Service Agent systems or partitions. This enables you to use another IBM Electronic Service Agent server with valid connectivity to IBM instead of a third-party proxy server. You can use IBM Electronic Service Agent graphical user interface to create the IBM Service and support proxy as your connection to the IBM Electronic Support website.

About this task

You can use the IBM Electronic Service Agent graphical user interface to create the IBM service and support proxy.

Tip: You can also use the **esacli supportProxySettings** command to create the IBM service and support proxy. For information, see “esacli supportProxySettings” on page 99.

To create the IBM service and support proxy, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Click **Settings**
3. Click **Service and support proxy**
4. Select **Configure this system or partition to serve as the connection point through which other systems or partitions on your network connect to IBM support.**
5. Specify the port number on which the service and support proxy server accepts connections from other systems or partitions. The default server port number is 5026.
6. Specify whether you want to add a rule so the firewall accepts connections on this port.

Note: Selecting this option adds firewall rules to typical Linux firewalls. However, if the system is monitored by custom firewalls, additional steps might be required to open these ports.

7. Specify whether authentication is required for the IBM Electronic Service Agent systems or partitions that use this service proxy. If required, specify the user name and password to use for this authentication.

8. Enter the information appropriate to your selection and click **OK**.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

“Configuring your service connection” on page 18

IBM Electronic Service Agent can connect to the IBM Electronic Support website through direct Internet (HTTPS) connection, service and support proxy, or HTTP proxy connection paths. IBM Electronic Service Agent uses these connection paths to report problems and send service information to the IBM Electronic Support website. IBM Electronic Service Agent uses IPv4 to connect to the IBM Electronic Support website.

“Testing connectivity to IBM”

When you have completed configuration of your connectivity settings, test for connectivity to IBM.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63

IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli supportProxySettings” on page 99

Use the **esacli supportProxySettings** command to set and display information that configures the Service and Support Proxy.

“esacli interfaces” on page 80

Use the **esacli interfaces** command to list the names of the network interfaces.

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

Testing connectivity to IBM

When you have completed configuration of your connectivity settings, test for connectivity to IBM.

About this task

IBM Electronic Service Agent communicates with several IBM servers, and all connections with IBM are backed up by redundant sites. So if a primary connect point is unavailable, a connection is attempted to a backup server.

To test connectivity to IBM, run either of the following commands:

```
/opt/ibm/esa/bin/verifyConnectivity -t
```

or

```
/opt/ibm/esa/bin/esacli test -c
```

Results

The system returns information similar to the following report.

Example

```
Performing Connectivity Verification Test
success Bulk_Data_1          www6.software.ibm.com      170.225.15.41    443
success Bulk_Data_2          www.ecurep.ibm.com         192.109.81.20    443
success Gateway_1           eccgw01.boulder.ibm.com    207.25.252.197   443
success Gateway_2           eccgw02.rochester.ibm.com  129.42.160.51    443
success Problem_Report_1    www-945.ibm.com            129.42.26.224    443
success Problem_Report_2    www-945.ibm.com            129.42.34.224    443
success Problem_Report_3    www-945.ibm.com            129.42.42.224    443
success SP_Config_1         www.ibm.com                 129.42.56.216    443
success SP_Config_2         www.ibm.com                 129.42.58.216    443
success SP_Config_3         www.ibm.com                 129.42.60.216    443
success SP_Config_4         www-03.ibm.com              204.146.30.17    443
success SP_Config_5         www.ibm.com                 129.42.56.216    80
success SP_Config_6         www.ibm.com                 129.42.58.216    80
success SP_Config_7         www.ibm.com                 129.42.60.216    80
success SP_Config_8         www-03.ibm.com              204.146.30.17    80
15 successes
0 failures
Connectivity Verification Test Results: succeeded
```

Note: Specific IP addresses are subject to change.

What to do next

If any connectivity failures are reported by the connectivity test, examine the settings of firewalls and proxy servers to ensure that a connection between IBM Electronic Service Agent and the failing connection is allowed.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

Specifying service contact information

Specifying IBM Electronic Service Agent service contact information is the first step in preparing to connect to the IBM Electronic Support website.

Before you begin

You can specify the following information:

- Service contact information
- System location information
- Operational setting

Service contact information

Specify information about the company that owns or uses the system and a contact person for that system. Information that is designated with an asterisk (*) is required.

Tip: You can use the **esacli contactSettings** command to display and specify contact and location information. For information, see “esacli contactSettings” on page 71.

***Company name**

Company or organization that owns or uses the system.

***Contact name**

Name of the person to be contacted if IBM Support needs access to the system

***Telephone number**

Telephone number where IBM Support can reach the contact person. Valid United States and Canada telephone numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other telephone numbers can include any type of character but must be 5 - 30 characters in length.

Fax number

Fax number where IBM Support can reach the contact person. Valid United States and Canada fax numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other fax numbers can include any type of character but must be 5 - 30 characters in length.

Alternate fax number

Alternate fax number where IBM Support can reach the contact person. Valid United States and Canada fax numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other fax numbers can include any type of character but must be 5 - 30 characters in length.

***Email**

Fully qualified email address for the contact person. For example: myuserid@mycompany.com.

Alternate email

Fully qualified alternate email address for the contact person. For example: myuserid@mycompany.com.

Help desk number

Telephone number where IBM Support can reach the Help desk at the company. Valid United States and Canada telephone numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other telephone numbers can include any type of character but must be 5 - 30 characters in length.

Pager number

Telephone number where IBM Support can reach the pager for the contact person. Valid United States and Canada telephone numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other telephone numbers can include any type of character but must be 5 - 30 characters in length.

Street Address Lines 1, 2, and 3

Street address for the contact person.

City City where the contact person is located.

State or province

State or province where the contact person is located. The state or province must be specified as a valid code as defined by ISO-3166.

***Select your country or region**

Name of the country or region in which the contact person is located. For example: Canada.

Postal code

Postal code where the contact person is located.

System location information

Specify location information for the system. Information that is designated with an asterisk (*) is required.

Tip: You can use the **esacli locationSettings** command to display and specify contact and location information. For information, see “esacli locationSettings” on page 81.

***Select your country or region**

Name of the country or region in which the system is located. For example: Canada.

***State or province**

State or province where the system is located. The state or province must be specified as a valid code as defined by ISO-3166.

***Postal code**

Postal code where the system is located.

City** City where the system is located.Street Address**

Street address where the system is located.

***Building, floor, office**

Building, floor, and office of the system.

***Telephone number**

Telephone number for a location close to the system. Valid United States and Canada telephone numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other telephone numbers can include any type of character but must be 5 - 30 characters in length.

System information

Specify additional information about the system.

Machine is part of a cluster

Specify whether this machine is part of a cluster. If you specify that this machine is part of a cluster, you must specify the Type, Model, and Serial number of the systems that belong to this cluster.

Port number

Port number on which IBM Electronic Service Agent listens for requests from the browser for the graphical user interface or for requests that are entered at the command prompt. The default value is 5024.

About this task

Use one of the following methods to specify the contact information.

- Specify contact and location information during activation.
For information, see “Activating and configuring IBM Electronic Service Agent” on page 13.
- After IBM Electronic Service Agent is activated, you can use the IBM Electronic Service Agent graphical user interface (GUI) to specify contact and location

information. Select **Help** in the upper right corner of the panels if you have questions about the specific panel or the information to enter.

Tip: You can also use the **esacli contactSettings** command to display and specify contact and location information. For information, see “esacli contactSettings” on page 71.

To specify contact and location information, follow these steps:

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Service contact** to specify or change the contact information.
4. Select **System location** to specify or change the system location information.
5. Select **System information** to specify additional information about the system.

Related concepts:

“Activating and configuring IBM Electronic Service Agent” on page 13

After installing IBM Electronic Service Agent, you must activate and configure IBM Electronic Service Agent.

Related tasks:

“Using the activator command” on page 16

If you have many systems to activate and configure or there is little or no variation from one system to the next, it is easy to develop a script to activate and configure IBM Electronic Service Agent.

“Using the graphical user interface”

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli contactSettings” on page 71

Use the **esacli contactSettings** command to configure the service contact information.

“esacli locationSettings” on page 81

Use the **esacli locationSettings** command to configure and display the system location information.

Using IBM Electronic Service Agent

You can check whether IBM Electronic Service Agent is monitoring the status of your system, view problem information and activity, export and import a configuration, and manage who is authorized to view the information that is sent to the IBM Electronic Support website.

Using the graphical user interface

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help

for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Before you begin

On some systems, the firewall might block access through this port unless the `-w` option was used to add a firewall rule to the default firewall configuration when you are activating IBM Electronic Service Agent. To check whether the firewall port is open for remote browsers, enter the following command:

```
/opt/ibm/esa/bin/esafirewall status
```

This command displays whether IBM Electronic Service Agent graphical user interface port has access through the firewall that is running on the system.

If the port is blocked, you can use the following command to enable access from remote systems:

```
/opt/ibm/esa/bin/esafirewall enable
```

To remove the firewall rule added by the `-w` option, use the following command:

```
/opt/ibm/esa/bin/esafirewall clear
```

About this task

To access and use the IBM Electronic Service Agent graphical user interface, follow these steps:

Procedure

1. Open a browser and enter this web address:
`https://hostname:5024/esa`
Where *hostname* is the name or IP address of the system that runs IBM Electronic Service Agent.
2. On the Welcome pane, log in to the IBM Electronic Service Agent graphical user interface.

Note: Any user in the **root** group can log in to the graphical user interface.
3. If you receive a warning about an untrusted site certificate, accept the certificate or click **Yes** to proceed to the IBM Electronic Service Agent graphical user interface.

Results

You can select from the following options to display or modify the IBM Electronic Service Agent operations for this system or partition.

Note: Select **Help** in the upper right corner of any of the panes to view specific information about the pane or the information to enter.

- **Activate ESA**

The activation wizard takes you through the steps to activate Electronic Service Agent on your system. The activation includes specifying contact information and connectivity information to enable your system to connect to IBM support.

Note: Once you activate IBM Electronic Service Agent on this system, you can no longer see the **Activate ESA** option and you cannot use the Activation Wizard

- **All Systems**

The IBM Electronic Service Agent All Systems pane shows list of systems that are discovered by IBM Electronic Service Agent. You can also view the information or list of problems for a particular system.

- **All Problems**

The IBM Electronic Service Agent All Problems pane displays list of problems that are identified by IBM Electronic Service Agent. You can also view the information of a particular problem in detail.

- **Discovery**

On the IBM Electronic Service Agent Discovery pane you can configure the KVM hosts, verify the connectivity to a particular system, and view the discovery log details.

- **Service information**

The Service information pane displays the type of service information that is collected by IBM Electronic Service Agent and sent to the IBM Electronic Support website. This information includes hardware, software, system configuration, and performance management information. You can also use this pane to run an operational test to test the connection to the IBM Electronic Support website.

- **Activity log**

The Activity log pane displays IBM Electronic Service Agent activity for a specified time period.

- **Settings**

Select from the following options to specify or modify the IBM Electronic Service Agent settings for this system or partition.

- **Problem information**

Use the Problem information pane to set the frequency and number of retry attempts to make if automatic transmission of a service request to the IBM Electronic Support website fails.

- **Service information**

Use the Service information pane to specify and enable the type and frequency of information to collect.

- **Performance management collection**

Use the Performance management collection pane to enable and set the time of day at which to collect performance management information.

- **Operational test**

Use the Operational test pane to enable and specify the frequency of automatic testing of the connection to IBM.

- **System information**

Use the System information pane to display and change information for the system, partition, and cluster that is being monitored by IBM Electronic Service Agent and to specify the port number IBM Electronic Service Agent uses.

- **Notifications**

Use the Notifications pane to enable sending email notifications and SNMP traps to the locations that you specify.

- **Service contact**

Use the Service contact pane to specify information about the person that an IBM Support representative can contact about a problem reported by IBM Electronic Service Agent.

– **System location**

Use the System location pane to specify information about the physical location of the system that is being monitored by IBM Electronic Service Agent.

– **Service and support proxy**

Use the Service and support proxy pane to configure this system or partition to serve as a connection point through which other systems or partitions in your network connect to the IBM Electronic Support website.

– **Connectivity**

Use the Connectivity pane to specify multiple connections that IBM Electronic Service Agent can use to communicate with the IBM Electronic Support website.

– **Trace level**

Use the Trace level pane to specify the message severity level that is recorded during IBM Electronic Service Agent activity.

• **Export Configuration**

Export IBM Electronic Service Agent configuration to use the same contact and location information and operational settings on another system, or to save the configuration for future use on the same system.

• **Import Configuration**

Import IBM Electronic Service Agent configuration to use the same contact and location information and operational settings that is used on another system.

• **IBM ID**

Use the IBM ID pane to authorize users with IBM IDs to view service information that was sent to the IBM Electronic Support website by IBM Electronic Service Agent.

• **IBM Electronic Support**

Use the IBM Electronic Support pane to display and manage service requests to the IBM Electronic Support website.

• **Suspend/Resume**

The Display status pane shows the status of the IBM Electronic Service Agent monitoring, collecting, and reporting services. It also shows system information on which IBM Electronic Service Agent is running. You can use this pane to suspend or resume IBM Electronic Service Agent.

– **Suspend:** Problem monitoring and collecting, and sending service information is stopped when Electronic Service Agent is suspended. However, the other Electronic Service Agent graphical user interface functions continue to operate.

– **Resume:** If Electronic Service Agent is suspended, it needs to be resumed to start problem monitoring and collecting, and sending service information. ESA is resumed automatically after you reboot the system or can be done through this graphical user interface function.

Displaying system information





The **All Systems** pane displays all the systems that are discovered by the IBM Electronic Service Agent

Before you begin

By default, the system on which ESA is installed is automatically discovered and is displayed in the list. You can also view the **System Health** and **ESA Status** of the discovered devices.

About this task

The **All Systems** table displays the following information:

- **Host Name** - Displays the name of the system that is discovered.
 - To filter or search for a particular system that you require, enter the initial letters of the system in the **Search** field. A list of filtered systems is displayed.
 - Click the system name to view the information of the system.
- **System Health** - Determines the health of the discovered device. Click the health of a system to view the problems of the particular system.
 - The  icon indicates that the discovered system is working fine.
 - The  icon indicates that the discovered system has some problems.
- **ESA Status** - Identifies if ESA can reach the system.
 - The  icon indicates that the discovered system is reachable.
 - The  icon indicates that the discovered system is not reachable.

Procedure

- Click **Refresh** to view the updated list of systems that are discovered.
- Click **System Info** to view the information of the selected system. For detailed system information, see *Results*.
- Click **View Problems** to view the problems of the selected system. For all problems or detailed problem information, see “Displaying problem information” on page 30
- Click **Delete System** to delete the respective system.

Note: If you delete a system, ESA runs the **unsubscribe** command on the SEP to remove the KVM host, and ESA can no longer receive SNMP traps from that particular KVM host.

Results

The **System Info** pane displays with the following information:

- **Host Name** - Displays the host name of the system. For example, *llmjuno65b*.
- **Machine Type** - Displays the machine type of the system. For example, *8246*.
- **Machine Model** - Displays the model of the system. For example, *L2D*.
- **Serial Number** - Displays the serial number of the system. For example, *06BD4CA*.
- **Manufacturer** - Displays the manufacturer of the system. For example, *IBM*.
- **Operating System** - Displays the operating system that is running on the system. For example, *Linux*.
- **OS version** - Displays the version of the operation system that is running on the system. For example, *3.10.42-2004.pkvm2_1_1.8.ppc64*.
- **Firmware** - Displays the firmware version that is installed on the system. For example, *FW770.20 (AL770_068) (t) FW770.20 (AL770_068) (P)*.

- **PM Enabled** - Displays if the Performance Management is enabled on the system or not. For example, *Yes* or *No*.
- **ESA Status** - Displays the status of the system, if it is reachable or not. For example, *Online* or *Offline*.
- **System ID** - Displays the unique identifier of the system. For example, *11741de0963ad0f4bc*.

Note: For KVM guest system, the following details are defined by default -

- **Machine Type** - *KVM_GUEST*
- **Machine Model** - *EMU*
- **Serial Number** - *KVMG*

Displaying problem information

The **All Problems** pane displays all the problems (service requests) for systems that are monitored by IBM Electronic Service Agent.

Before you begin

The System reference codes (SRCs) indicate a storage complex hardware or software problem that can originate in hardware or in Licensed Internal Code. A storage complex component generates an error code when it detects a problem. An SRC identifies the component that detected the error code and describes the error condition. The table shows the possible SRC codes -

Table 1. System reference codes

System Reference Code	Description
5xxxxxx	Reference codes
A1xxxxx	Service processor reference (attention) codes
AAxxxxx	Partition firmware reference (attention) codes
B1xxxxx	Service processor firmware reference codes
B7xxxxx	Licensed Internal Code reference codes
BAxxxxx	Partition firmware reference (attention) codes
DAxxxxx	Partition firmware reference (error) codes

For a detailed list of SRC codes, see System Reference Codes.

For the problems from KVM host, the SRC number in the SNMP alert is used as the error code, while ESA is determining the duplicate events. Errors with the same SRC numbers do not generate extra serviceable events. Instead, the dupe count increments, if the original problem is still in OPEN state. The problem status is checked and updated daily when successfully submitted.

Note: KVM guest operating systems cannot report problems, as ESA detects the environment and disables problem reporting when installed on KVM guests.

About this task

You can use the IBM Electronic Service Agent graphical user interface to view problems, delete problems, and update the service request status. Electronic Service

Agent does not collect any error data or problem information for Admin_notify type of events and duplicate events. The problem information and error data is collected for the problems that are meant to be transmitted to IBM support.

Tip: You can also use the **esacli problem** command to view problems. For information, see “esacli problem” on page 89.

To view problems, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **All Problems**. The Problems table displays the following information:
 - **System Name** - Displays the name of the system that has problems. If you are viewing **All Problems**, then you can filter the problems for a particular system.
 - **Description** - Provides a short description of the problem identified.
 - **SRC** - Displays the alphanumeric system reference code (SRC) assigned to the problem by the system.
 - **Occured** - Displays the time stamp of the problem occurrence.
 - **Local Problem ID** - Displays a unique ID that identifies a problem.
 - **Problem Status** - Displays the status of the problem, if it is in *Opened*, *Closed*, *Detected*, *Failed*, or *Reported* state.
 - **Service request** - Displays the system request identifier (PMR number) that is assigned to the problem by the system.
 - **Service request status** - Displays the service request status (PMR status) that is associated with problem. For example, *Open*, *Processing*, or *Closed*.
3. Select a problem in the list to take one of the following actions:
 - Click **Refresh Problems** to update the service request status.
 - Click **Delete** to delete the problem.
 - Click **Details** to view the problem details. The **Problem Detail** pane displays the following information for a particular problem.

Problem Summary

- **Description** - Displays a short description of the problem that is identified.
- **Error Code** - Displays the alphanumeric system reference code (SRC) assigned to the problem by the system.
- **Problem Status** - Displays the reporting status of the problem. The status can be one of the following:
 - *Open* - No action is taken on the problem.
 - *Pending* - The problem is in the process of being sent to IBM support.
 - *Failed* - All attempts to send the problem information to IBM support is failed. No more attempts can be made.
 - *Reported* - The problem was sent to IBM support.
 - *Closed* - The problem was processed and closed.
- **Problem ID** - Displays a unique ID that identifies a problem.
- **Is Test Problem?** - Identifies if the problem is a test problem or a real problem. The test problems are the simulated problems and are automatically closed.

- **Problem Occurrence Date/Time** - Displays the time stamp at which the problem was occurred.

Transmission Summary

- **Service information sent to IBM support** - Displays Yes or No, if the information is not sent to IBM support.
- **Last Attempt to Send** - Displays the time stamp at which ESA tried to send the service information to IBM support.
- **Number of Attempts** - Displays the number of attempts that ESA made to send the service information to IBM support.

Service request information

- **Problem Severity** - Displays the severity of the problem.
- **Service Number** - Displays the service request identifier that is assigned to the problem by the system.
- **Service Status** - Displays the service request status that is associated with problem. For example, *Open*, *Processing*, or *Closed*.
- **Last Changed** - Displays the time stamp at which the service request status was last changed.

You can also send a test problem to see whether the problem is reporting correctly. For more information, see “Sending a test problem” on page 34.

Related concepts:

“Problem processing overview” on page 3

Problem processing is an important capability of IBM Electronic Service Agent. When IBM Electronic Service Agent detects a problem, there is a specific sequence of events that occur to record the problem, report the problem, resolve the problem, and close the problem.

Related tasks:

“Sending a test problem” on page 34

Send a test problem to the IBM Electronic Support website to see whether the problem reporting function is working correctly.

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63

IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli problem” on page 89

Use the **esacli problem** command to work with problems for the IBM Electronic Service Agent instance.

Discovering systems

You can configure or discover multiple KVM hosts on which, Serviceable Event Provider is installed and listen the SNMP traps sent by Serviceable Event Provider (SEP).

Before you begin

The IBM Electronic Service Agent manages multiple PowerKVM hosts remotely from a PowerLinux server, which is on the same network. The Electronic Service Agent communicates with all the remote hosts through SSH protocol. The PowerKVM host must have Serviceable Event Provider that is installed on it, which can detect problems and produce events when necessary. If SEP is not installed on the PowerKVM system, you must install SEP before you discover systems. For information on installing Serviceable Event Provider, see *Installing IBM Serviceable Event Provider*. During the discovery of KVM hosts, the IBM Electronic Service Agent makes sure that the Serviceable Event Provider is installed on the KVM host and also activates the SEP, if not started already.

About this task

Electronic Service Agent runs the **subscribe** command on Serviceable Event Provider, with the port number to which the SNMP traps must be sent and the name of the community to be used by the trap. ESA listens the SNMP traps at the default *public* community and *5028* port. When the SNMP traps are received, ESA processes them and sends to IBM support, if it is a call home problem. The serviceable events include the hardware problems that require IBM service in resolving the problems. ESA also identifies if it is a test or a real problem. For information on problem details, see “Displaying problem information” on page 30.

Procedure

To discover the KVM hosts, follow these steps:

1. Enter the **System Name** - the KVM host name or the IP address.

Note: The ESA discovers only the PowerKVM hosts. No other types of systems are supported.

2. Enter the **User ID** and **Password** of the system.
3. Click **Verify Connectivity** to verify the connectivity to the system.
 - If the system is connected, you get the message - **Successfully connected to 10.10.10.10.**
 - If the system is unable to connect, you get the message - **Can not connect to 10.10.10.10.**
4. Click **Add System** to add the respective system. After the system is added, it is displayed in the discovery log table. During discovery, ESA performs the following steps:
 - a. Logs in to the KVM host with the entered credentials.
 - b. Creates a ESA specific user name on the KVM host -**esaadmin**

Note: The **esaadmin** user ID has limited admin privileges, which can run all the commands needed by ESA.

- c. Generates public-private key pairs that are stored on ESA and are used to access the new user IDs on the remote KVM host. These keys are configured on KVM hosts, such that only ESA system can log in without a password. Hence the root credentials for any KVM host system are not stored / saved at all in this process.
 - d. ESA uses **esaadmin** for any further communication with remote KVM host.
5. Click **Clear** to clear the **System Name**, **User ID**, and **Password** fields.

Note: To verify the connectivity for a system, or add a system, that is already in the discovery log, click the log entry to auto-populate the **System Name** and **User ID** fields. But, **Password** must be entered again manually.

Results

After you discover a system, the discovery log table is updated with the following system information:

- **System Name** - Displays the name of the system that is discovered. To filter or search for a particular system that you require, enter the initial letters or digits of the respective system in the **Search** field. A list of filtered systems is displayed.
- **User Id** - Displays the user ID to log in to the system.
- **Start Time** - Displays the time at which the discovery was started.
- **Updated Time** - Displays the time at which the status is last updated.
- **Status** - Displays the status of the discovery of a system.
 - **Running** - If the system while discovery.
 - **Success** - If ESA discovers the system successfully.
 - **Failed** - If ESA is unable to discover the system.
- **Status Details** - Displays the details or reason for failure. For example,
 - If the discovery is fails, the **Status Details** column displays - **Discovery Action Failed**.
 - If the discovery is successful, the **Status Details** column displays - **Discovery Completed Successfully**.

Note: The discovery log details will persist for 24 hours only, after which, the log details are deleted. Click **Refresh Log** to refresh the discovery log table.

What to do next

On successful discovery of KVM hosts, you can view the problems reported by each discovered system. For information on problem details, “Displaying problem information” on page 30

Sending a test problem

Send a test problem to the IBM Electronic Support website to see whether the problem reporting function is working correctly.

About this task

Sending a test problem to the IBM Electronic Support website is done through the IBM Electronic Service Agent graphical user interface.

Tip: You can also use the **esacli test** command to create a test problem and check your connection and transmission of service information. For information, see “esacli test” on page 102.

To send a test problem to the IBM Electronic Support website, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Click **All Systems** tab.

3. Select a system and click **View Problems** or you can directly click **System Health** icon of a particular system. The **Problems** page displays.
4. Click **Send Test Problem**. The message - Test problem was successfully sent! displays.
5. Click **Refresh problems** to see whether the test problem shows up in the problem summary list.

Related tasks:

“Displaying problem information” on page 30

The **All Problems** pane displays all the problems (service requests) for systems that are monitored by IBM Electronic Service Agent.

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

Running an operational test

Check to see whether your connection and the transmission of service information to the IBM Electronic Support website is working correctly.

About this task

Checking your connection and the transmission of service information to the IBM Electronic Support website is done using the IBM Electronic Service Agent graphical user interface.

Tip: You can also use the **esacli test -o** command to check your connection and transmission of service information. For information, see “esacli test” on page 102.

To check your connection and the transmission of service information to the IBM Electronic Support website, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Service information**.
3. Click **Run operational test**. The results of the test are displayed. You can also view the results of the test in the activity log. See Displaying the activity log.

Related tasks:

“Displaying the activity log” on page 37

Displaying the activity log enables you to see all IBM Electronic Service Agent activity for a designated time period.

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

Collecting and sending service information

IBM Electronic Service Agent collects and sends service information to IBM. Service information consists of hardware, software, system configuration, and performance management information about the system being monitored by IBM Electronic Service Agent.

About this task

You can use the IBM Electronic Service Agent graphical user interface to collect and send service information to the IBM Electronic Support website.

Tip: You can also use the **esacli service** command to collect and send service information to the IBM Electronic Support website. For information, see “esacli service” on page 93.

To manually collect and send service information to the IBM Electronic Support website, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface. See “Using the graphical user interface” on page 25.
2. Select **Service Information**. On this panel, you can see what types of service information are collected, when they were last collected, and when they will be collected next.
3. On the Service information panel, select the service information categories that you want to collect.
4. Select **Collect information**.
5. Click **Go**. The selected types of information are gathered. You can also run an operational test to determine whether your connection and the transmission of service information to the IBM Electronic Support website is working correctly. For information, see “Running an operational test” on page 35.

Results

If data is unchanged from the data that is collected in the previous collection, no data is submitted to IBM. The Activity Log panel displays when the data was sent to IBM.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

“Running an operational test” on page 35

Check to see whether your connection and the transmission of service information to the IBM Electronic Support website is working correctly.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63

IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli service” on page 93

Use the **esacli service** command to immediately send inventory to IBM.

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

Collecting extended error data

Extended error data is collected for every serviceable event that is sent to IBM (call home events) from the KVM host. Whenever a hardware problem is identified, ESA collects all system logs, configuration, and diagnostic information that can be used for debugging.

ESA automatically retrieves the compressed error data file, saves it locally and transmits to IBM support. ESA uses **Secure copy protocol (SCP)** to retrieve the compressed file from the KVM host. For this process, SSH must be running on both KVM host and ESA.

- After retrieving the extended error data by ESA, it is removed from the KVM host.
- After transmitting the extended error data to IBM, it is removed on the ESA installed host.

The extended error data is appended to the service requests (PMR) for diagnosing the problems.

Displaying the activity log

Displaying the activity log enables you to see all IBM Electronic Service Agent activity for a designated time period.

About this task

You can use the IBM Electronic Service Agent graphical user interface to display the activity log.

Tip: You can also use the **esacli activity** command to display the activity log. For information, see “esacli activity” on page 66.

To display the activity log, follow these steps:

Procedure

1. Access and log on to the IBM Electronic Service Agent graphical user interface.
2. Select **Activity log**.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli activity” on page 66

Use the **esacli activity** command to display activity log entries for the IBM Electronic Service Agent instance.

Configuring operational settings

You can configure operational settings for IBM Electronic Service Agent to perform the functions that are important to your service environment.

Before you begin

About this task

You can configure operational settings using the IBM Electronic Service Agent graphical user interface.

Tip: You can also use the **esacli export** and **esacli import** commands to configure operational settings. For information, see “Configuring operational tests” on page 48.

To configure operational settings, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Operational test**.
4. Select the settings category for the settings that you want to configure or change. Select **Help** in the upper right corner of the panels if you have questions about the specific panel or the information to enter.

For information about IBM Electronic Service Agent settings that you can change, see “Using the graphical user interface” on page 25.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access

the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli export” on page 74

Use the **esacli export** command to export the configuration settings for the IBM Electronic Service Agent instance.

“esacli import” on page 79

Use the **esacli import** command to import the configuration settings for the IBM Electronic Service Agent instance.

Exporting a configuration

You can export IBM Electronic Service Agent configuration information to a file so you can use the same contact and location information and operational settings on another system.

About this task

You can use the IBM Electronic Service Agent graphical user interface to export a configuration.

Tip: You can also use the **esacli export** command to export a configuration. For information, see “esacli export” on page 74.

Note: The export function of the IBM Electronic Service Agent graphical user interface creates a configuration file and provides a means to download the file. The **esacli export** command only creates a configuration file.

To export a configuration, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Click **Export Configuration** tab.
3. Click **Export settings** to export the configuration information to a file.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“esacli export” on page 74

Use the **esacli export** command to export the configuration settings for the IBM Electronic Service Agent instance.

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

Importing a configuration

You can import an IBM Electronic Service Agent configuration file so you can use the same contact and location information and operational settings as used on another system.

Before you begin

For information about creating a configuration file, see “Exporting a configuration” on page 39.

About this task

You can use the IBM Electronic Service Agent graphical user interface to import a configuration file.

Tip: You can also use the **esacli import** command to import a configuration file. For information, see “esacli import” on page 79. You can only use the **esacli import** command to import a local configuration file.

To import a configuration, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Click **Import Configuration** tab.
3. Select **Import local** file or **Import remote** file.
4. Enter the name of the configuration file you want to import.
5. Click **Import** to import the configuration information.

Related tasks:

“Exporting a configuration” on page 39

You can export IBM Electronic Service Agent configuration information to a file so you can use the same contact and location information and operational settings on another system.

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“esacli import” on page 79

Use the **esacli import** command to import the configuration settings for the IBM Electronic Service Agent instance.

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

Providing IBM IDs

An IBM ID is needed to view service information that was sent to the IBM Electronic Support website by IBM Electronic Service Agent. Service information can be viewed on the IBM Electronic Support website.

Before you begin

Important: The first IBM ID that is sent to IBM from IBM Electronic Service Agent becomes the administrator. The administrator has the only IBM ID that has the authority to manage IBM IDs using the IBM Electronic Support website functions.

To register for a new IBM ID, go to My IBM profile website and click **Register**.

For security and privacy reasons, it is necessary that an IBM ID be associated with a specific system. Only the specified IDs are able to view the service information for that system.

About this task

You can use the IBM Electronic Service Agent graphical user interface to authorize users to view service information. Select **Help** in the upper right corner of the panel if you have questions about the information to enter.

Tip: You can also use the `esacli ibmId` command to authorize users to view service information collection. For information, see “`esacli ibmId`” on page 78.

To authorize users to view service information, follow these steps:

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **IBM ID**.
3. Enter the IBM ID of the authorized user in the **IBM ID to add** field.
4. Click **Add** to add the ID to the **IBM IDs to send** list.
5. Click **Send authorizations**.

What to do next

To manage your IBM IDs, which includes associating new IBM IDs with a system or removing existing IBM IDs, go to the IBM Electronic Support website and click **Services administration**.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“`esacli ibmId`” on page 78

Use the `esacli ibmId` command to add IBM user IDs that can access the Electronic Service Agent support website to view status.

Related information:

Accessing the IBM Electronic Support Portal

The IBM Electronic Support portal enables you to view service information reported by IBM Electronic Service Agent, search all content using advanced search capabilities, open and manage service requests, receive support content notifications by platform or individual product, and view call home problem events.

Accessing the IBM Electronic Support portal

The IBM Electronic Support portal enables you to view service information reported by IBM Electronic Service Agent, search all content using advanced search capabilities, open and manage service requests, receive support content notifications by platform or individual product, and view call home problem events.

You can access the IBM Electronic Support portal at the following web addresses:

- <http://support.ibm.com>: A portfolio of tools and resources to keep your systems, software, and applications running smoothly.
- <http://www-01.ibm.com/support/electronicssupport/>: The support portal to view contracts, inventory, heartbeat, etc of your systems.

Note: To use some of the functions that are found on the IBM Electronic Support portal, such as viewing service information or call home events, you must provide an IBM ID.

Related tasks:

“Providing IBM IDs” on page 40

An IBM ID is needed to view service information that was sent to the IBM Electronic Support website by IBM Electronic Service Agent. Service information can be viewed on the IBM Electronic Support website.

Managing IBM Electronic Service Agent

You can configure and manage IBM Electronic Service Agent. This includes modifying the configuration and specifying how IBM Electronic Service Agent monitors and collects problem information, and sends service information to IBM.

Using the graphical user interface

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Before you begin

On some systems, the firewall might block access through this port unless the `-w` option was used to add a firewall rule to the default firewall configuration when you are activating IBM Electronic Service Agent. To check whether the firewall port is open for remote browsers, enter the following command:

```
/opt/ibm/esa/bin/esafirewall status
```

This command displays whether IBM Electronic Service Agent graphical user interface port has access through the firewall that is running on the system.

If the port is blocked, you can use the following command to enable access from remote systems:

```
/opt/ibm/esa/bin/esafirewall enable
```

To remove the firewall rule added by the `-w` option, use the following command:

```
/opt/ibm/esa/bin/esafirewall clear
```

About this task

To access and use the IBM Electronic Service Agent graphical user interface, follow these steps:

Procedure

1. Open a browser and enter this web address:

```
https://hostname:5024/esa
```

Where *hostname* is the name or IP address of the system that runs IBM Electronic Service Agent.

2. On the Welcome pane, log in to the IBM Electronic Service Agent graphical user interface.

Note: Any user in the **root** group can log in to the graphical user interface.

3. If you receive a warning about an untrusted site certificate, accept the certificate or click **Yes** to proceed to the IBM Electronic Service Agent graphical user interface.

Results

You can select from the following options to display or modify the IBM Electronic Service Agent operations for this system or partition.

Note: Select **Help** in the upper right corner of any of the panes to view specific information about the pane or the information to enter.

- **Activate ESA**

The activation wizard takes you through the steps to activate Electronic Service Agent on your system. The activation includes specifying contact information and connectivity information to enable your system to connect to IBM support.

Note: Once you activate IBM Electronic Service Agent on this system, you can no longer see the **Activate ESA** option and you cannot use the Activation Wizard

- **All Systems**

The IBM Electronic Service Agent All Systems pane shows list of systems that are discovered by IBM Electronic Service Agent. You can also view the information or list of problems for a particular system.

- **All Problems**

The IBM Electronic Service Agent All Problems pane displays list of problems that are identified by IBM Electronic Service Agent. You can also view the information of a particular problem in detail.

- **Discovery**

On the IBM Electronic Service Agent Discovery pane you can configure the KVM hosts, verify the connectivity to a particular system, and view the discovery log details.

- **Service information**

The Service information pane displays the type of service information that is collected by IBM Electronic Service Agent and sent to the IBM Electronic Support website. This information includes hardware, software, system configuration, and performance management information. You can also use this pane to run an operational test to test the connection to the IBM Electronic Support website.

- **Activity log**

The Activity log pane displays IBM Electronic Service Agent activity for a specified time period.

- **Settings**

Select from the following options to specify or modify the IBM Electronic Service Agent settings for this system or partition.

- **Problem information**

Use the Problem information pane to set the frequency and number of retry attempts to make if automatic transmission of a service request to the IBM Electronic Support website fails.

- **Service information**

Use the Service information pane to specify and enable the type and frequency of information to collect.

- **Performance management collection**

Use the Performance management collection pane to enable and set the time of day at which to collect performance management information.

- **Operational test**

Use the Operational test pane to enable and specify the frequency of automatic testing of the connection to IBM.

- **System information**

Use the System information pane to display and change information for the system, partition, and cluster that is being monitored by IBM Electronic Service Agent and to specify the port number IBM Electronic Service Agent uses.

- **Notifications**

Use the Notifications pane to enable sending email notifications and SNMP traps to the locations that you specify.

- **Service contact**

Use the Service contact pane to specify information about the person that an IBM Support representative can contact about a problem reported by IBM Electronic Service Agent.

- **System location**

Use the System location pane to specify information about the physical location of the system that is being monitored by IBM Electronic Service Agent.

- **Service and support proxy**

Use the Service and support proxy pane to configure this system or partition to serve as a connection point through which other systems or partitions in your network connect to the IBM Electronic Support website.

- **Connectivity**

Use the Connectivity pane to specify multiple connections that IBM Electronic Service Agent can use to communicate with the IBM Electronic Support website.

- **Trace level**

Use the Trace level pane to specify the message severity level that is recorded during IBM Electronic Service Agent activity.

- **Export Configuration**

Export IBM Electronic Service Agent configuration to use the same contact and location information and operational settings on another system, or to save the configuration for future use on the same system.

- **Import Configuration**

Import IBM Electronic Service Agent configuration to use the same contact and location information and operational settings that is used on another system.

- **IBM ID**

Use the IBM ID pane to authorize users with IBM IDs to view service information that was sent to the IBM Electronic Support website by IBM Electronic Service Agent.

- **IBM Electronic Support**

Use the IBM Electronic Support pane to display and manage service requests to the IBM Electronic Support website.

- **Suspend/Resume**

The Display status pane shows the status of the IBM Electronic Service Agent monitoring, collecting, and reporting services. It also shows system information on which IBM Electronic Service Agent is running. You can use this pane to suspend or resume IBM Electronic Service Agent.

- **Suspend:** Problem monitoring and collecting, and sending service information is stopped when Electronic Service Agent is suspended. However, the other Electronic Service Agent graphical user interface functions continue to operate.

- **Resume:** If Electronic Service Agent is suspended, it needs to be resumed to start problem monitoring and collecting, and sending service information. ESA is resumed automatically after you reboot the system or can be done through this graphical user interface function.

Configuring problem reporting

You can specify that IBM Electronic Service Agent continue to attempt to report a problem if initial transmission fails. You can also configure the frequency and number of times IBM Electronic Service Agent attempts to report a problem.

About this task

You can use the IBM Electronic Service Agent graphical user interface to configure problem reporting.

Tip: You can also use the `esacli problemSettings` command to configure problem reporting. For information, see “`esacli problemSettings`” on page 91.

To configure this problem reporting, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Problem information**.
4. To enable IBM Electronic Service Agent to retry problem submissions, click **Retry**.
5. Specify the number of minutes between attempts.
6. Specify the number of retry attempts.
7. Click **Apply** to save your changes or **OK** to save your changes and exit this panel.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli problemSettings” on page 91

Use the **esacli problemSettings** command to set and display information about how frequently Electronic Service Agent attempts to call a problem home when it is not initially successful at calling home the problem.

Configuring service information collection

You can specify the type of information that you want IBM Electronic Service Agent to collect, and the time and frequency for the collection.

About this task

You can use the IBM Electronic Service Agent graphical user interface to configure service information collection.

Tip: You can also use the **esacli serviceSettings** command to configure service information collection. For information, see “esacli serviceSettings” on page 94.

To configure service information collection, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Click **Service information**. The Service information panel is displayed.
4. Specify the information that you want IBM Electronic Service Agent to collect. You can enable IBM Electronic Service Agent to collect hardware, software, and system configuration information.
5. Specify the collection time and frequency for each type of information that you want IBM Electronic Service Agent to collect.

6. Click **Apply** to save your selections or click **OK** to save your selections and exit this panel.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli serviceSettings” on page 94

Use the **esacli serviceSettings** command to set and display information about the types of inventory that is collected and the schedule for sending that inventory to IBM.

Configuring performance management information collection

You can enable IBM Electronic Service Agent to collect performance management information and specify the collection time.

About this task

You can use the IBM Electronic Service Agent graphical user interface to configure performance management information collection.

Tip: You can also use the **esacli serviceSettings** command to configure performance management information collection. For information, see “esacli serviceSettings” on page 94.

To configure performance management information collection, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Click **Performance management collection**. The Performance management collection panel is displayed.
4. Specify whether you want IBM Electronic Service Agent to collect performance management information.
5. Specify the time that you want IBM Electronic Service Agent to collect performance management information.
6. Click **Apply** to save your selections or click **OK** to save your selections and exit this panel.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access

the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli serviceSettings” on page 94

Use the **esacli serviceSettings** command to set and display information about the types of inventory that is collected and the schedule for sending that inventory to IBM.

Configuring operational tests

You can specify that IBM Electronic Service Agent regularly test the connection and transmission of service information to the IBM Electronic Support website.

About this task

You can use the IBM Electronic Service Agent graphical user interface to configure regular operational tests.

Tip: You can also use the **esacli export** and **esacli import** commands to configure regular operational tests by following these steps:

1. Enter the following command:

```
esacli export -f operationalsettings.script
```

2. Edit `operationalsettings.script` and modify the following section with the desired operational test settings:

```
#####  
# Operational Test Settings  
#  
# Used to configure the schedule on which Electronic Service Agent will conduct  
# an automated operational test communication with IBM.  
#  
# Properties and values:  
# OPERATIONALTEST_ENABLED          Perform automated operational test.  
#                                 (0=No, 1=Yes)  
# OPERATIONALTEST_INTERVAL         Test interval in days.  
#                                 (1-21)  
# OPERATIONALTEST_TIME             Test time of day in 24 hour format.  
#                                 (HH:MM)  
#####  
OPERATIONALTEST_ENABLED = 1  
OPERATIONALTEST_INTERVAL = 1  
OPERATIONALTEST_TIME = 21:30
```

3. Save `operationalsettings.script`.
4. Import the changes to modify the operational settings by running the following command:

```
esacli import -f operationalsettings.script
```

For information, see “esacli export” on page 74 and “esacli import” on page 79.

To configure regular operational tests, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Operational test**. The Operational test panel is displayed.

4. Specify whether you want IBM Electronic Service Agent to automatically test the connection to the IBM Electronic Support website.
5. Specify the frequency and time of day that you want IBM Electronic Service Agent to run these operational tests.
6. Click **Apply** to save your selections or click **OK** to save your selections and exit this panel.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

Specifying notifications

You can use notifications to send email and SNMP traps about IBM Electronic Service Agent activity to the locations you specify.

About this task

You can use the IBM Electronic Service Agent graphical user interface to specify these notifications.

Tip: You can also use the **esacli notificationSettings** command to specify notifications. For information, see “esacli notificationSettings” on page 84.

To specify notifications, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Notifications** and enter the information for the email notifications and SNMP traps you want to send.
4. Click **Apply**. If you click **Send test notification** before applying the changes by clicking **Apply**, the previous settings are used.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux
command-line prompt.

“esacli notificationSettings” on page 84

Use the **esacli notificationSettings** to set and display information indicating
where Electronic Service Agent will send notifications when errors occur.

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic
Service Agent instance.

Specifying service contact information

Specifying IBM Electronic Service Agent service contact information is the first step
in preparing to connect to the IBM Electronic Support website.

Before you begin

You can specify the following information:

- Service contact information
- System location information
- Operational setting

Service contact information

Specify information about the company that owns or uses the system and a contact
person for that system. Information that is designated with an asterisk (*) is
required.

Tip: You can use the **esacli contactSettings** command to display and specify
contact and location information. For information, see “esacli contactSettings” on
page 71.

*Company name

Company or organization that owns or uses the system.

*Contact name

Name of the person to be contacted if IBM Support needs access to the
system

*Telephone number

Telephone number where IBM Support can reach the contact person. Valid
United States and Canada telephone numbers must be 10 - 30
alphanumeric characters and cannot contain any dashes. Other telephone
numbers can include any type of character but must be 5 - 30 characters in
length.

Fax number

Fax number where IBM Support can reach the contact person. Valid United
States and Canada fax numbers must be 10 - 30 alphanumeric characters
and cannot contain any dashes. Other fax numbers can include any type of
character but must be 5 - 30 characters in length.

Alternate fax number

Alternate fax number where IBM Support can reach the contact person.
Valid United States and Canada fax numbers must be 10 - 30 alphanumeric
characters and cannot contain any dashes. Other fax numbers can include
any type of character but must be 5 - 30 characters in length.

***Email**

Fully qualified email address for the contact person. For example:
myuserid@mycompany.com.

Alternate email

Fully qualified alternate email address for the contact person. For example:
myuserid@mycompany.com.

Help desk number

Telephone number where IBM Support can reach the Help desk at the company. Valid United States and Canada telephone numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other telephone numbers can include any type of character but must be 5 - 30 characters in length.

Pager number

Telephone number where IBM Support can reach the pager for the contact person. Valid United States and Canada telephone numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other telephone numbers can include any type of character but must be 5 - 30 characters in length.

Street Address Lines 1, 2, and 3

Street address for the contact person.

City City where the contact person is located.

State or province

State or province where the contact person is located. The state or province must be specified as a valid code as defined by ISO-3166.

***Select your country or region**

Name of the country or region in which the contact person is located. For example: Canada.

Postal code

Postal code where the contact person is located.

System location information

Specify location information for the system. Information that is designated with an asterisk (*) is required.

Tip: You can use the **esacli locationSettings** command to display and specify contact and location information. For information, see “esacli locationSettings” on page 81.

***Select your country or region**

Name of the country or region in which the system is located. For example: Canada.

***State or province**

State or province where the system is located. The state or province must be specified as a valid code as defined by ISO-3166.

***Postal code**

Postal code where the system is located.

***City** City where the system is located.

***Street Address**

Street address where the system is located.

***Building, floor, office**

Building, floor, and office of the system.

***Telephone number**

Telephone number for a location close to the system. Valid United States and Canada telephone numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other telephone numbers can include any type of character but must be 5 - 30 characters in length.

System information

Specify additional information about the system.

Machine is part of a cluster

Specify whether this machine is part of a cluster. If you specify that this machine is part of a cluster, you must specify the Type, Model, and Serial number of the systems that belong to this cluster.

Port number

Port number on which IBM Electronic Service Agent listens for requests from the browser for the graphical user interface or for requests that are entered at the command prompt. The default value is 5024.

About this task

Use one of the following methods to specify the contact information.

- Specify contact and location information during activation.
For information, see “Activating and configuring IBM Electronic Service Agent” on page 13.
- After IBM Electronic Service Agent is activated, you can use the IBM Electronic Service Agent graphical user interface (GUI) to specify contact and location information. Select **Help** in the upper right corner of the panels if you have questions about the specific panel or the information to enter.

Tip: You can also use the **esaccli contactSettings** command to display and specify contact and location information. For information, see “esaccli contactSettings” on page 71.

To specify contact and location information, follow these steps:

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Service contact** to specify or change the contact information.
4. Select **System location** to specify or change the system location information.
5. Select **System information** to specify additional information about the system.

Related concepts:

“Activating and configuring IBM Electronic Service Agent” on page 13

After installing IBM Electronic Service Agent, you must activate and configure IBM Electronic Service Agent.

Related tasks:

“Using the activator command” on page 16

If you have many systems to activate and configure or there is little or no variation from one system to the next, it is easy to develop a script to activate and configure IBM Electronic Service Agent.

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli contactSettings” on page 71

Use the **esacli contactSettings** command to configure the service contact information.

“esacli locationSettings” on page 81

Use the **esacli locationSettings** command to configure and display the system location information.

Creating the IBM Service and Support proxy

IBM Electronic Service Agent can function as a proxy server for other IBM Electronic Service Agent systems or partitions. This enables you to use another IBM Electronic Service Agent server with valid connectivity to IBM instead of a third-party proxy server. You can use IBM Electronic Service Agent graphical user interface to create the IBM Service and support proxy as your connection to the IBM Electronic Support website.

About this task

You can use the IBM Electronic Service Agent graphical user interface to create the IBM service and support proxy.

Tip: You can also use the **esacli supportProxySettings** command to create the IBM service and support proxy. For information, see “esacli supportProxySettings” on page 99.

To create the IBM service and support proxy, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Click **Settings**
3. Click **Service and support proxy**
4. Select **Configure this system or partition to serve as the connection point through which other systems or partitions on your network connect to IBM support.**
5. Specify the port number on which the service and support proxy server accepts connections from other systems or partitions. The default server port number is 5026.
6. Specify whether you want to add a rule so the firewall accepts connections on this port.

Note: Selecting this option adds firewall rules to typical Linux firewalls. However, if the system is monitored by custom firewalls, additional steps might be required to open these ports.

7. Specify whether authentication is required for the IBM Electronic Service Agent systems or partitions that use this service proxy. If required, specify the user name and password to use for this authentication.
8. Enter the information appropriate to your selection and click **OK**.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

“Configuring your service connection” on page 18

IBM Electronic Service Agent can connect to the IBM Electronic Support website through direct Internet (HTTPS) connection, service and support proxy, or HTTP proxy connection paths. IBM Electronic Service Agent uses these connection paths to report problems and send service information to the IBM Electronic Support website. IBM Electronic Service Agent uses IPv4 to connect to the IBM Electronic Support website.

“Testing connectivity to IBM” on page 21

When you have completed configuration of your connectivity settings, test for connectivity to IBM.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63

IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli supportProxySettings” on page 99

Use the **esacli supportProxySettings** command to set and display information that configures the Service and Support Proxy.

“esacli interfaces” on page 80

Use the **esacli interfaces** command to list the names of the network interfaces.

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

Configuring your service connection

IBM Electronic Service Agent can connect to the IBM Electronic Support website through direct Internet (HTTPS) connection, service and support proxy, or HTTP proxy connection paths. IBM Electronic Service Agent uses these connection paths to report problems and send service information to the IBM Electronic Support website. IBM Electronic Service Agent uses IPv4 to connect to the IBM Electronic Support website.

About this task

If you use only a default direct Internet connection, no additional configuration is needed. However, if a direct connection is not always available, you can configure IBM Electronic Service Agent to communicate with IBM using a proxy server. In fact, you can specify up to three proxy servers. IBM Electronic Service Agent uses the connections in the order they appear, so if one service connection is not configured, busy, or unavailable, the next service connection is used.

You can use the IBM Electronic Service Agent graphical user interface to configure your service connection.

Tip: You can also use the **esacli connectionSettings** command to configure your service connection. For information, see “esacli connectionSettings” on page 68.

To configure your service connection using the graphical user interface, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Connectivity**.
4. Select the type of connectivity you want to create or change.
 - **Direct connect**

Connecting IBM Electronic Service Agent to the IBM Electronic Support website through a direct HTTPS Internet connection is fast and efficient. This is the default configuration.
 - **Proxy**

Connecting IBM Electronic Service Agent through the IBM Service and Support proxy or your HTTP proxy can be fast and easy from your business network, and minimizes the number of systems that are directly connected to the Internet.

If you decide to use the IBM Service and Support proxy, it should be created on an exit point system. See “Common exit point topology” on page 9 for information about using an exit point for IBM Electronic Service Agent. Then go to “Creating the IBM Service and Support proxy” on page 20 before specifying the proxy connection type.
5. To specify a proxy connection type, follow these steps:
 - a. In the **IP address or host name** field, enter the IP address of the proxy server through which you want this system to connect.
 - b. In the **Port** field, enter the port number on which the proxy server accepts connections.
 - c. In the **Destination user** field, enter the user ID to use if the proxy server requires authentication.
 - d. In the **Destination password** and **Verify password** fields, enter the password to use if the proxy server requires authentication.
 - e. Optionally, click **Test** to test the connection before adding it to the service configuration.
 - f. Click **Add** to create or change the service configuration. IBM Electronic Service Agent uses the connections in the order they appear, so if one service connection is not configured, busy, or unavailable, the next service connection is used.
 - g. To change the order of the connections, select a connection and click **Move up** or **Move down** until the connections are in the desired order.
6. When you are satisfied with the connection definitions and order, click **Apply** or **OK** to save the configuration.

Related concepts:

“Topology” on page 8

Ensure that you consider your topology when planning for IBM Electronic Service Agent.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

“Creating the IBM Service and Support proxy” on page 20

IBM Electronic Service Agent can function as a proxy server for other IBM Electronic Service Agent systems or partitions. This enables you to use another IBM Electronic Service Agent server with valid connectivity to IBM instead of a third-party proxy server. You can use IBM Electronic Service Agent graphical user interface to create the IBM Service and support proxy as your connection to the IBM Electronic Support website.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli connectionSettings” on page 68

Use the **esacli connectionSettings** command to set and display information about the connections to IBM.

Setting the trace level

Trace level determines the message severity that is recorded during IBM Electronic Service Agent activity.

About this task

You can use the IBM Electronic Service Agent graphical user interface to set the trace level.

Tip: You can also use the **esacli logSettings** command to set the trace level. For information, see “esacli logSettings” on page 83.

To set the trace level, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Select **Settings**.
3. Select **Trace level**.
4. Select the trace level for the message severity you want recorded during IBM Electronic Service Agent activity. The least detailed amount of data is logged with the setting **Severe**, and the most detailed amount of data is logged with setting **Trace**.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux
command-line prompt.

“esacli logSettings” on page 83

Use the **esacli logSettings** command to set and display information for the
current logging level.

Checking status

You can check whether IBM Electronic Service Agent is monitoring your system.

About this task

You can use the IBM Electronic Service Agent graphical user interface to check the
status of IBM Electronic Service Agent.

Tip: You can also use the **esacli status** command to display the status of the
IBMElectronic Service Agent instance. For information, see “esacli status” on page
97.

To use the graphical user interface to check the status of IBM Electronic Service
Agent, follow these steps:

Procedure

1. Access and log on to the IBM Electronic Service Agent graphical user interface.

Note: If you cannot access the IBM Electronic Service Agent graphical user
interface, log in to the system as **root** or sign on using a root-authorized user
ID, and then enter the following command:

```
service esacli status
```

Running this command only displays whether IBM Electronic Service Agent is
running on the system. The graphical user interface option displays additional
information and gives you the option of either suspending or resuming IBM
Electronic Service Agent. For more information, see “Suspending and resuming
IBM Electronic Service Agent” on page 58

2. Select **Suspend/Resume**.

The Display status panel is displayed. This panel shows whether IBM
Electronic Service Agent is monitoring this system and shows the properties of
the system or partition. From this panel, you can also suspend or resume IBM
Electronic Service Agent.

Related tasks:

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to
manage and control IBM Electronic Service Agent. It uses standard graphical
controls to access IBM Electronic Service Agent functions and includes online help
for each pane. You can access the graphical user interface on the system that is
running IBM Electronic Service Agent or from any remote system that can access
the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux
command-line prompt.

“esacli status” on page 97

Use the **esacli status** command to display the status of the IBM Electronic Service Agent instance.

Deactivating IBM Electronic Service Agent

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you want to deactivate IBM Electronic Service Agent until you choose to restart it, or when you want to deactivate only certain IBM Electronic Service Agent functions. There are several methods for deactivating IBM Electronic Service Agent, depending on the situation.

Use the following table to determine the appropriate method for deactivating IBM Electronic Service Agent.

If you want to...	You should...	To start using IBM Electronic Service Agent again...
Stop monitoring for problems and collecting and sending service information, but still use the graphical user interface functions	Suspend IBM Electronic Service Agent	Resume IBM Electronic Service Agent
Stop monitoring for problems, collecting and sending service information, and using all graphical user interface functions until you restart the system or manually restart IBM Electronic Service Agent	Stop IBM Electronic Service Agent	Start IBM Electronic Service Agent or restart the system on which IBM Electronic Service Agent is installed
Stop monitoring for problems, collecting and sending service information, and using all graphical user interface functions until you manually restart IBM Electronic Service Agent	Disable IBM Electronic Service Agent	Start IBM Electronic Service Agent

Suspending and resuming IBM Electronic Service Agent

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to suspend or resume IBM Electronic Service Agent.

Before you begin

Problem monitoring and collecting and sending service information is stopped when IBM Electronic Service Agent is suspended. However, the other IBM Electronic Service Agent graphical interface functions continue to operate. Suspending and resuming Electronic Service Agent is done using the Electronic Service Agent graphical user interface. Select **Help** from the graphical user interface panels if you have questions about the specific panel or the information to enter.

Tip: You can also use the **esacli suspend** and **esacli resume** commands to suspend and resume Electronic Service Agent. For information, see “esacli suspend” on page 101 and “esacli resume” on page 92.

About this task

To suspend or resume IBM Electronic Service Agent, follow these steps:

Procedure

1. Access and log in to the IBM Electronic Service Agent graphical user interface.
2. Click **Suspend/Resume**.
3. Select **Suspend** or **Resume**.

Note: If IBM Electronic Service Agent is suspended, only the Resume option is available. If IBM Electronic Service Agent is running, only the Suspend option is available.

Related tasks:

“Stopping and starting IBM Electronic Service Agent”

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to stop or start IBM Electronic Service Agent.

“Disabling IBM Electronic Service Agent” on page 60

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to disable IBM Electronic Service Agent.

“Using the graphical user interface” on page 25

The IBM Electronic Service Agent graphical user interface is an intuitive way to manage and control IBM Electronic Service Agent. It uses standard graphical controls to access IBM Electronic Service Agent functions and includes online help for each pane. You can access the graphical user interface on the system that is running IBM Electronic Service Agent or from any remote system that can access the same local or remote network.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63

IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli start” on page 97

Use the **esacli start** command to start Electronic Service Agent.

“esacli stop” on page 98

Use the **esacli stop** command to stop Electronic Service Agent.

“esacli suspend” on page 101

Use the **esacli suspend** command to suspend Electronic Service Agent.

“esacli resume” on page 92

Use the **esacli resume** command to resume monitoring of the system by Electronic Service Agent.

Stopping and starting IBM Electronic Service Agent

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to stop or start IBM Electronic Service Agent.

Before you begin

Problem monitoring and collecting, and sending service information is stopped when IBM Electronic Service Agent is stopped, along with the IBM Electronic Service Agent graphical user interface functions. IBM Electronic Service Agent must be started again to activate these functions. If IBM Electronic Service Agent is

stopped it will restart after rebooting the system. If you want to stop problem monitoring and collecting and sending service information but continue to use the other IBM Electronic Service Agent graphical user interface functions, you should suspend IBM Electronic Service Agent.

About this task

To stop or start IBM Electronic Service Agent, follow these steps:

Procedure

1. Log in to the system as `root` or sign on using a root-authorized user ID.
2. At the command prompt, enter either of the following commands:
 - To stop IBM Electronic Service Agent, enter the following command:
service esactl stop IBM Electronic Service Agent is temporarily stopped, and will restart when the system is rebooted.
 - To start IBM Electronic Service Agent, enter the following command:
service esactl start

Related tasks:

“Suspending and resuming IBM Electronic Service Agent” on page 58
IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to suspend or resume IBM Electronic Service Agent.

“Disabling IBM Electronic Service Agent”

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to disable IBM Electronic Service Agent.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esactl start” on page 97

Use the **esactl start** command to start Electronic Service Agent.

“esactl stop” on page 98

Use the **esactl stop** command to stop Electronic Service Agent.

“esactl suspend” on page 101

Use the **esactl suspend** command to suspend Electronic Service Agent.

“esactl resume” on page 92

Use the **esactl resume** command to resume monitoring of the system by Electronic Service Agent.

Disabling IBM Electronic Service Agent

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to disable IBM Electronic Service Agent.

Before you begin

Problem monitoring and collecting, and sending service information is stopped when IBM Electronic Service Agent is stopped, along with the IBM Electronic Service Agent graphical user interface functions. However, if IBM Electronic Service Agent is stopped, it will restart when the system is rebooted. If you want to permanently deactivate IBM Electronic Service Agent, you should disable IBM

Electronic Service Agent rather than stopping it. IBM Electronic Service Agent will remain disabled until it is manually started.

About this task

To disable IBM Electronic Service Agent, follow these steps:

Procedure

1. Log in to the system as `root` or sign on using a root-authorized user ID.
2. At the command prompt, enter the following command:

```
service esactl disable
```

IBM Electronic Service Agent is disabled until manually started. For information about starting IBM Electronic Service Agent, see “Stopping and starting IBM Electronic Service Agent” on page 59

Related tasks:

“Stopping and starting IBM Electronic Service Agent” on page 59

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to stop or start IBM Electronic Service Agent.

“Suspending and resuming IBM Electronic Service Agent” on page 58

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to suspend or resume IBM Electronic Service Agent.

Related reference:

“Using the IBM Electronic Service Agent command line interface” on page 63
IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

“esacli start” on page 97

Use the **esacli start** command to start Electronic Service Agent.

“esacli stop” on page 98

Use the **esacli stop** command to stop Electronic Service Agent.

“esacli suspend” on page 101

Use the **esacli suspend** command to suspend Electronic Service Agent.

“esacli resume” on page 92

Use the **esacli resume** command to resume monitoring of the system by Electronic Service Agent.

Unconfiguring IBM Electronic Service Agent

You should not unconfigure IBM Electronic Service Agent unless directed to do so by a customer service representative.

About this task

Attention: Unconfiguring IBM Electronic Service Agent is a destructive operation that discards configuration data on the local system. If possible, export the configuration so that the customer contact and system location information can be restored. When IBM Electronic Service Agent is activated following unconfiguration, a new entity ID is associated with the system. Information that is associated with the previous entity ID and system is no longer updated. To access the systems data, you must again associate an IBM ID with the system.

To unconfigure IBM Electronic Service Agent, follow these steps:

Procedure

1. Log in to the system as root.
2. At the command prompt, enter the following command:

```
/opt/ibm/esa/bin/unconfig.sh
```

Related tasks:

“Exporting a configuration” on page 39

You can export IBM Electronic Service Agent configuration information to a file so you can use the same contact and location information and operational settings on another system.

Uninstalling IBM Electronic Service Agent

Before you uninstall IBM Electronic Service Agent, determine whether you want to save the configuration information to use for another system or later on this system.

IBM Electronic Service Agent can be uninstalled from your system using a Linux command. Uninstalling removes the IBM Electronic Service Agent code and configuration information. The configuration information contains contact and location information, and operational settings.

You can choose whether to save your configuration information before you uninstall IBM Electronic Service Agent. If you plan to install IBM Electronic Service Agent again later and want to use the same configuration information, or use the same configuration information for another system, you should save the configuration information for later use.

Note: If you uninstall and install IBM Electronic Service Agent again later, you are advised to re-subscribe the KVM hosts.

Related tasks:

“Installing IBM Electronic Service Agent” on page 11

You must install IBM Electronic Service Agent to enable problem detection, reporting, and transmission of service information to the IBM Electronic Support website.

Uninstalling IBM Electronic Service Agent and saving configuration information

Uninstalling IBM Electronic Service Agent and saving configuration information enables you to reuse the configuration for the next installation or another system.

Before you begin

The configuration information contains contact and location information, and operational settings.

About this task

To save the configuration information and uninstall IBM Electronic Service Agent, follow these steps:

Procedure

1. Export the configuration information from IBM Electronic Service Agent and save the file. For information about how to export the configuration information, see Exporting a configuration.

2. Use your normal process for uninstalling software to uninstall IBM Electronic Service Agent. The IBM Electronic Service Agent fileset is `esagent.pLinux`.
3. Enter the following RPM uninstallation command:

```
rpm -e esagent.pLinux
```

Related tasks:

“Exporting a configuration” on page 39

You can export IBM Electronic Service Agent configuration information to a file so you can use the same contact and location information and operational settings on another system.

Uninstalling IBM Electronic Service Agent without saving configuration information

If you uninstall IBM Electronic Service Agent without saving configuration information, you will not be able to reuse the configuration for the next installation.

Before you begin

If you do not save the configuration information, you must reconfigure IBM Electronic Service Agent if you reinstall it on this system.

About this task

To uninstall IBM Electronic Service Agent without saving the configuration information, follow these steps:

Procedure

1. Use your normal process for uninstalling software to uninstall IBM Electronic Service Agent. The IBM Electronic Service Agent fileset is `esagent.pLinux`.
2. Enter the following RPM uninstallation command:

```
rpm -e esagent.pLinux
```

Related tasks:

“Uninstalling IBM Electronic Service Agent and saving configuration information” on page 62

Uninstalling IBM Electronic Service Agent and saving configuration information enables you to reuse the configuration for the next installation or another system.

Using the IBM Electronic Service Agent command line interface

IBM Electronic Service Agent operations can be performed from a Linux command-line prompt.

The basic command to run is `/opt/ibm/esa/bin/esacli`. Except where otherwise noted, `esacli` subcommands can only be used following activation of IBM Electronic Service Agent. For information about activating IBM Electronic Service Agent, see “Activating and configuring IBM Electronic Service Agent” on page 13.

Related tasks:

“Displaying problem information” on page 30

The **All Problems** pane displays all the problems (service requests) for systems that are monitored by IBM Electronic Service Agent.

esacli

Use the **esacli** command to control the locally running IBM Electronic Service Agent instance.

Synopsis

```
esacli subcommand subcommand-options
```

Description

The **esacli** command enables you to control the locally running IBM Electronic Service Agent instance.

Operands

subcommand

Specifies the specific subcommand to be performed.

Options

subcommand-options

Specifies the options specific to the subcommand to be performed. See the specific subcommand documentation for the options specific to the command.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **5**: An unsupported command was specified.
- **9**: Unexpected error. Contact your support.
- **10**: Unsupported option was specified. Option: {option}.
- **13**: An invalid host name was specified for a subcommand host option.
- **14**: A required option was not provided. Option: {option}.
- **16**: The export operation failed. Reason: {Reason}
- **17**: The import operation failed. Reason: {Reason}
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **20**: An output file could not be created. Reason: {Reason}
- **21**: An input file could not be read. Reason: {Reason}
- **22**: An invalid email address was specified. Email: {email} for option {option}.
- **23**: An invalid country was specified. Country: {country}.
- **24**: An invalid phone number was specified. Phone: {Phone}
- **25**: An invalid state or province was specified. State: {State}
- **26**: An invalid postal code: {code} for country code {country code} and state/province {state/province}
- **27**: An invalid IBM ID was specified. IBM ID: {id}
- **28**: Activation failed. Reason: {Reason}.
- **29**: The IBM Electronic Service Agent instance has not been activated.
- **30**: The IBM Electronic Service Agent instance is currently suspended.
- **31**: An integer value was not provided when required. Option: {name} Value: {value}.
- **32**: An integer value was not in the valid range. Option: {option value} Range: {min-max}.
- **33**: Connectivity test failed.
- **34**: Notification test failed. Reason: {Reason}

- **35:** Operational test failed
- **36:** Test problem creation failed.
- **37:** Invalid problem ID specified.
- **38:** Problem deletion failed.
- **39:** Problem update failed.
- **40:** IBM Electronic Service Agent instance is not currently suspended.
- **41:** Invalid value specified: {value}. Value should be specified like {date format} for option {option}.
- **42:** Invalid value {value} specified for the {option} option.
- **43:** IBM Electronic Service Agent is already active.
- **44:** IBM Electronic Service Agent did not start.
- **45:** Mutually exclusive arguments used together.
- **46:** Can not delete required information.
- **47:** Unable to update connection settings. Reason: {reason}
- **49:** The {collector} collector did not start. Reason: {Reason}
- **50:** The primary and secondary contacts can not be the same.
- **51:** The help subcommand {command} is not supported.
- **52:** Administrator privileges needed to run this command.
- **55:** Option {option} is not a valid option when {option} is set to {value}.
- **56:** Interface {interface} not valid. Reason: {reason}.

Examples

- No command specified

This example illustrates running the **esacli** command without specifying a subcommand to run.

Usage: `esacli <subcommand> <subcommand-options>`

Subcommands:

<code>activity</code>	Show activity log entries.
<code>connectionSettings</code>	Configures connectivity to IBM through proxy servers.
<code>contactSettings</code>	Sets and lists contact information for the monitored system.
<code>export</code>	Export configuration settings.
<code>help</code>	Provides command help.
<code>ibmId</code>	Sets IBM ids associated with this ESA system.
<code>import</code>	Import configuration settings.
<code>interfaces</code>	Lists the network interface cards.
<code>locationSettings</code>	Configures and displays system location information.
<code>logSettings</code>	Sets and lists logging level.
<code>notificationSettings</code>	Configures notification settings.
<code>problem</code>	Work with problems.
<code>problemSettings</code>	Configures frequency of notification retries in case of failure and displays settings.
<code>resume</code>	ESA resumes monitoring of the system.
<code>service</code>	Displays inventory collection settings and collects inventory.
<code>serviceSettings</code>	Configures the frequency of inventory collection.
<code>start</code>	Starts ESA.
<code>status</code>	Display Electronic Service Agent status.
<code>stop</code>	Stops ESA.
<code>supportProxySettings</code>	Configures and displays Service and Support Proxy settings.
<code>suspend</code>	ESA suspends monitoring of the system.
<code>test</code>	Performs test operations for connectivity, notification, operations, and problem generation.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli activity

Use the **esacli activity** command to display activity log entries for the IBM Electronic Service Agent instance.

Synopsis

```
esacli activity [[-m count] | [{"-b start-date-time} {"-e end-date-time}]]
```

Description

The **esacli activity** command enables you to display activity log entries for the IBM Electronic Service Agent instance.

Options

- m** | **--max** *count*
Specifies the maximum number of entries from the end of the activity log to be displayed. A positive integer value must be specified. The entire activity log is displayed if this option is not specified.
- b** | **--begin** *date-timestamp*
Specifies a date and time for the earliest entry from the activity log to be returned. The date and time may be specified using local conventions for specifying a date and time. Use help for this command to see a sample format for specifying a date and time value. The date and time can also be specified using ISO 8601 an international system for specifying dates and times. An ISO 8601 date and time should be expressed with the following format: YYYY-MM-DD HH:MM. The time is expressed using a 24-hour clock.
- e** | **--end** *date-timestamp*
Specifies a date and time for the latest entry from the activity log to be returned. The date and time may be specified using local conventions for specifying a date and time. Use help for this command to see a sample format for specifying a date and time value. The date and time can also be specified using ISO 8601 an international system for specifying dates and times. An ISO 8601 date and time should be expressed with the following format: YYYY-MM-DD HH:MM. The time is expressed using a 24-hour clock.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: The IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **14**: A required option was not provided. Option: {option}.
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **29**: IBM Electronic Service Agent instance has not been activated.
- **31**: An integer value was not provided when required.
- **32**: An integer value was not in the valid range.
- **41**: Invalid value specified: {value}. Value should be specified like {date format} for option {option}.
- **42**: Invalid value {value} specified for the {option} option.
- **45**: Mutually exclusive arguments used together.

Examples

- List the last six entries in the activity log

This example illustrates running the **esacli activity** command to list the last six entries in the activity log.

```
esacli activity -m 6
```

Activity log entries:

```
Jul 23, 2010 5:43:39 PM: Operational test successful.
Jul 22, 2010 8:59:28 PM: Software service information sent.
Jul 22, 2010 8:58:34 PM: Software service information collection initiated.
Jul 22, 2010 8:57:39 PM: Software service information sent.
Jul 22, 2010 8:55:40 PM: Hardware service information collection initiated.
Jul 22, 2010 8:56:34 PM: Software service information sent
```

- List the activity entries between two dates using a locale format.

This example illustrates running **esacli activity** to list the activity between two dates and times using a locale specific format.

```
esacli activity -b "Jul 22, 2012" -e "Jul 24, 2012"
```

Activity log entries:

```
Jul 23, 2012 5:43:39 PM: Operational test successful.
Jul 22, 2012 8:59:28 PM: Software service information sent.
Jul 22, 2012 8:58:34 PM: Software service information collection initiated.
Jul 22, 2012 8:57:39 PM: Software service information sent.
Jul 22, 2012 8:55:40 PM: Hardware service information collection initiated.
Jul 22, 2012 8:56:34 PM: Software service information sent.
```

- List the activity entries between two dates

This example illustrates running **esacli activity** to list the activity between two dates using an ISO 8601 format.

```
esacli activity -b 2012-07-21 -e 2012-07-24
```

Activity log entries:

```
Jul 23, 2012 5:43:39 PM: Operational test successful.
Jul 22, 2012 8:59:28 PM: Software service information sent.
Jul 22, 2012 8:58:34 PM: Software service information collection initiated.
Jul 22, 2012 8:57:39 PM: Software service information sent.
Jul 22, 2012 8:55:40 PM: Hardware service information collection initiated.
Jul 22, 2012 8:56:34 PM: Software service information sent.
```

Related tasks:

“Displaying the activity log” on page 37

Displaying the activity log enables you to see all IBM Electronic Service Agent activity for a designated time period.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli clusterInformation

Use the **esacli clusterInformation** command to set and display information for a cluster.

Synopsis

```
esacli clusterInformation { [ -d ] }
```

```
esacli clusterInformation { [ -e false ] }
```

```
esacli clusterInformation [-e true] {-t type} {-m model} {-s serialVersion}
```

Description

The **esacli clusterInformation** command sets and displays information for a cluster. This command indicates that it completed successfully with a message: This command completed successfully. When the display option is specified, the

new settings are displayed. This command also displays the current settings when run with only the display option or when no option is specified.

Options

- d** | **--display**
Specifies that the setting values must be displayed.
- e** | **--enable** *true or false*
Specifies to enable or disable the cluster
- t** | **--type** *Machine Type*
Specifies the type of the machine.
- m** | **--model** *Machine Model*
Specifies the model of the machine.
- s** | **--serial** *serial Number*
Specifies the serial number of the machine.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}
- **14**: A required option was not provided. Option: {option}
- **19**: An option value was not provided when required. Option: {option}

Examples

- Display the cluster information.

```
esacli clusterInformation [-d]
Machine is part of cluster: true
Type: 9110
Model Number: 51A
Serial Number: 10607EA
```
- Set the cluster information.

```
esacli clusterInformation -e true -t 9110 -m 51A -s 10607EA
esacli clusterInformation -e false
```

esacli connectionSettings

Use the **esacli connectionSettings** command to set and display information about the connections to IBM.

Synopsis

```
esacli connectionSettings [-d [script]]
```

```
esacli connectionSettings {-t direct}
```

```
esacli connectionSettings {-t proxy} {-h hostname} {-p port} [-u user] [-w password]
[-r connection_number]
```

```
esacli connectionSettings [-k connection_number]
```

Description

The **esacli connectionSettings** command sets and displays information about the connections to IBM. This command configures connectivity to IBM either directly and through a proxy server. Electronic Service Agent can be configured with up to

three connections. This command will indicate that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings will be displayed. This command will also display the current settings when run with only the display option or no option is specified.

Options

-d | --display

Specifies the setting values are to be displayed.

The optional script option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify connectionSettings values, follow these steps:

1. Display the current connectionSettings values by running the following command:

```
esacli connectionSettings -d
```

Tip: You can display the help for the connectionSettings command by running the following command: `esacli help connectionSettings`.

2. Save the output of the connectionSettings command to a file by running the following command:

```
esacli connectionSettings -d script > connections.script
```

3. Edit the connections.script file to specify the wanted values.
4. Change the connections.script file to an executable script file.
5. Run the connections.script file to set the connectionSettings values on this or other systems.

-t | --type direct or proxy

Specifies if the connection to IBM is made through a direct connection or through a proxy connection

-h | --hostname IP address or hostname

Specifies the host name or IP address of the proxy server

-p | --port integer between 1 and 65535

Specifies a proxy server port

-u | --userid user

Optional. Specifies a proxy user ID

-w | --password password

Optional. Specifies a proxy password. The command will prompt for the password if the option but not the value is provided.

-r | --replace integer 1-3

Replaces the existing connection by number. Connection numbers are viewed using the display option of this command to retrieve the Connection number field.

-k | --remove integer 1-3

Deletes an existing connection by number. Connection numbers are viewed using the display option of this command to retrieve the Connection number field.

Exit status

The following table contains the codes that are returned by this command.

- **0:** The operation completed successfully.

- **1:** IBM Electronic Service Agent instance is not running.
- **10:** Unsupported option was specified. Option: {option}.
- **13:** An invalid host name was specified for a subcommand host option.
- **14:** A required option was not provided. Option: {option}.
- **18:** An option was set more than once. Option: {option}.
- **19:** An option value was not provided when required. Option: {option}.
- **31:** An integer value was not provided when required. Option: {name} Value: {value}.
- **32:** An integer value was not in the valid range. Option: {option value} Range: {min-max}.
- **42:** Invalid value {value} specified for the {option} option.
- **47:** Unable to update connection settings. Reason: {reason}

Examples

- List connections

This example shows how to display the connections.

```
esacli connectionSettings -d
Connection List
Connection Number: 1
Type: Direct

Connection Number: 2
Type: Proxy
Proxy IP address or host name: proxy.ibm.com
Proxy Port: 5026
Destination user name: user1
Password: *****

Connection Number: 3
Type: Proxy
Proxy IP address or host name: proxy2.ibm.com
Proxy Port: 5026
Destination user name: user1
```

- Add a direct connection to IBM

This example shows how to add a direct connection to IBM.

```
esacli connectionSettings -x true
```

- Add a proxy connection to IBM

This example shows how to add a proxy connection to IBM.

```
esacli connectionSettings set -x false -h proxy.ibm.com -p 5026 -u user1 -w password
```

- Replace first connection with a proxy connection to IBM

This example shows how to replace the first connection with a proxy connection to IBM.

```
esacli connectionSettings set -x false -h proxy.ibm.com -p 5026 -u user1 -w password -r 1
```

- Remove the first connection to IBM

This example shows how to remove the first connection to IBM.

```
esacli connectionSettings-k 1
```

Related tasks:

“Configuring your service connection” on page 18

IBM Electronic Service Agent can connect to the IBM Electronic Support website through direct Internet (HTTPS) connection, service and support proxy, or HTTP proxy connection paths. IBM Electronic Service Agent uses these connection paths to report problems and send service information to the IBM Electronic Support website. IBM Electronic Service Agent uses IPv4 to connect to the IBM Electronic Support website.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli contactSettings

Use the **esacli contactSettings** command to configure the service contact information.

Synopsis

```
esacli contactSettings [-d [script]]
```

```
esacli contactSettings [-d [script]] {-o organization} [-a address]  
[-b address] [-h address] [-m city] [-s state] {-c country}  
[-z postal-code] [-f phone] [-g alt fax] [-q help] {-n contact name}  
{-p contact phone} [-i alt phone] {-e contact email} [-j alt email]  
[-y pager] {-w secondary name} {-k secondary contact phone}  
[-r secondary contact alt phone] {-x secondary contact email}
```

Description

The **esacli contactSettings** command configures the service contact information. The **esacli contactSettings** command displays and sets the configuration information for IBM Electronic Service Agent instance associated with the service contact information. All required fields must be entered to run this command. All optional fields not specified will be cleared. This command will indicate that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings will be displayed. This command will also display the current settings when run with only the display option or no option is specified.

Options

-d | **--display**

Specifies the setting values are to be displayed.

The optional *script* option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify *contactSettings* values, follow these steps:

1. Display the current *contactSettings* values by running the following command:

```
esacli contactSettings -d
```

Tip: You can display the help for the *contactSettings* command by running the following command: `esacli help contactSettings`.

2. Save the output of the *contactSettings* command to a file by running the following command:

```
esacli contactSettings -d script > contacts.script
```

3. Edit the `contacts.script` file to specify the wanted values.
4. Change the `contacts.script` file to an executable script file.
5. Run the `contacts.script` file to set the *contactSettings* values on this or other systems.

-o | **--organization** *organization*

Specifies the name of the organization or company responsible for the system.

-a | **--organization.address1** *address*

Specifies the address line 1 where the organization is located.

- b | **--organization.address2** *address*
Specifies the address line 2 where the organization is located.
- h | **--organization.address3** *address*
Specifies the address line 3 where the organization is located.
- m | **--organization.city** *city*
Specifies the name of the city where the organization is located.
- s | **--organization.state** *state*
Specifies the name of the state or province where the organization is located. If the organization country is set to the United States or Canada, then a valid state or province setting must be a valid 2 character state or province abbreviation.
- c | **--organization.country** *country*
Specifies the name of the country or region for the organization. The country must be specified as a valid two letter code as defined by ISO-3166. This setting cannot be cleared.
- z | **--organization.postal** *postal_code*
Specifies the postal code where the organization is located.
- f | **--organization.fax** *phone*
Specifies the facsimile (fax) number where the organization is located. Valid United States and Canada numbers must be 10 - 30 alphanumeric characters in length. Other telephone numbers must be 5 - 30 characters in length.
- g | **--organization.altfax** *phone*
Specifies the alternate facsimile (fax) number where the organization is located. Valid United States and Canada numbers must be 10 - 30 alphanumeric characters in length. Other telephone numbers must be 5 - 30 characters in length.
- q | **--organization.help** *phone*
Specifies the telephone help desk number for the organization. Valid United States and Canada numbers must be 10 - 30 alphanumeric characters in length. Other telephone numbers must be 5 - 30 characters in length.
- n | **--contact.name** *name*
Specifies the name of the primary person responsible for the system. This setting cannot be cleared.
- p | **--contact.phone** *phone*
Specifies the telephone number where the primary contact person can be reached. Valid United States and Canada numbers must be 10 - 30 alphanumeric characters in length. Other telephone numbers must be 5 - 30 characters in length. This setting cannot be cleared.
- i | **--contact.altphone** *phone*
Specifies the telephone number where the primary contact person can be reached. Valid United States and Canada numbers must be 10 - 30 alphanumeric characters in length. Other telephone numbers must be 5 - 30 characters in length.
- e | **--contact.email** *email*
Specifies the email address for the primary contact person. This setting cannot be cleared.
- j | **--contact.altemail** *email*
Specifies the alternative email address for the primary contact person.

- y | **--contact.pager phone**
Specifies the pager number where the secondary contact person can be reached. Valid United States and Canada numbers must be 10 - 30 alphanumeric characters in length. Other telephone numbers must be 5 - 30 characters in length. This number can contain a PIN number.
- w | **--sec.contact.name name**
Specifies the name of the secondary person in the organization responsible for the system. This setting cannot be cleared.
- k | **--sec.contact.phone phone**
Specifies the telephone number where the secondary contact person can be reached. Valid United States and Canada numbers must be 10 - 30 alphanumeric characters in length. Other telephone numbers must be 5 - 30 characters in length. This setting cannot be cleared.
- r | **--sec.contact.altphone phone**
Specifies an alternative telephone number where the secondary contact person can be reached. Valid United States and Canada numbers must be 10 - 30 alphanumeric characters in length. Other telephone numbers must be 5 - 30 characters in length.
- x | **--sec.contact.email email**
Specifies the email address for the secondary contact person. This setting cannot be cleared.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **14**: A required option was not provided. Option: {option}.
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **22**: An invalid email address was specified. Email: {email} for option {option}.
- **23**: An invalid country or region was specified. Country: {country}.
- **24**: An invalid phone number was specified. Phone: {Phone}
- **25**: An invalid state or province was specified. State: {State}
- **26**: An invalid postal code: {code} for country code {country code} and state/province {state/province}
- **42**: Invalid value {value} specified for the {option} option.
- **50**: The primary and secondary contacts cannot be the same.

Examples

- Display the current contact settings

This example shows how to use **esacli contactSettings** to display the current settings.

```

esacli contactSettings -d
Company Information
  Company name:          IBM
  Street address Line 1: 2455 South Rd
  Line 2:
  Line 3:
  City:                  Poughkeepsie
  State or province:     NY
  Country or region:     US
  Postal code:           12603
  Fax number:            9296307095

```

```

    Alternate fax number:    0016024545
    Help desk number:      4777736840
Primary Contact
    Contact name:          Primary Contact
    Telephone number:      0312810438
    Alternate telephone number: 6724959392
    E-mail:                email1@ibm.com
    Alternate e-mail:      email2@ibm.com
    Pager number:          5638578295
Secondary Contact
    Contact name:          Secondary Contact
    Telephone number:      4233691129
    Alternate telephone number: 7173103933
    E-mail:                email3@lotus.com

```

- Set several values

This example shows how to use **esacli contactSettings** to set several values.

```

esacli contactSettings -o IBM
-a "2455 South Rd."
-m "Poughkeepsie"
-s "NY"
-c "US"
-z "12601"
-n "John Primary"
-p "8455559464"
-e "jd@ibm.com"
-w "Joe Backup"
-k "8455551212"
-x "jbackup@us.ibm.com"

```

Related tasks:

“Using the activator command” on page 16

If you have many systems to activate and configure or there is little or no variation from one system to the next, it is easy to develop a script to activate and configure IBM Electronic Service Agent.

“Specifying service contact information” on page 22

Specifying IBM Electronic Service Agent service contact information is the first step in preparing to connect to the IBM Electronic Support website.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli export

Use the **esacli export** command to export the configuration settings for the IBM Electronic Service Agent instance.

Synopsis

```
esacli export {-f file_name} [-r]
```

Description

The **esacli export** command enables you to write the configuration settings for the IBM Electronic Service Agent instance to a file.

Options

-f | --file *file_name*

Specifies the name of a file to which the configuration settings are to be written.

The file can specify either an absolute path or a path relative to the current working directory. The file cannot already exist unless the replace option is specified.

-r | --replace

Specifies the file to which the configuration settings are to be written can replace an existing file.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **14**: A required option was not provided. Option: {option}.
- **16**: The export operation failed. Reason: {Reason}
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **20**: An output file could not be created. Reason: {Reason}

Examples

- Successful export

This example illustrates running the **esacli export** command.

```
esacli export -f export.file
```

Related tasks:

“Configuring operational settings” on page 38

You can configure operational settings for IBM Electronic Service Agent to perform the functions that are important to your service environment.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli help

Use the **esacli help** command to request information about using the **esacli** functions.

Synopsis

```
esacli help <subcommand>
```

Description

The **esacli help** command enables you to display the syntax and a brief description of the specified subcommand.

Operands

subcommand

Specifies the specific subcommand for which help is requested.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **51**: The help subcommand {command} is not supported.

Examples

- No subcommand specified

This example illustrates running the **esacli help** command without specifying a subcommand.

esacli help

Provide command help.

Usage: esacli help [subcommand]

Subcommands:

activity	Show activity log entries.
connectionSettings	Configures connectivity to IBM through proxy servers.
contactSettings	Sets and lists contact information for the monitored system.
export	Export configuration settings.
help	Provides command help.
ibmId	Sets IBM ids associated with this ESA system.
import	Import configuration settings.
interfaces	Lists the network interface cards.
locationSettings	Configures and displays system location information.
logSettings	Sets and lists logging level.
notificationSettings	Configures notification settings.
problem	Work with problems.
problemSettings	Configures frequency of notification retries in case of failure and displays settings.
resume	ESA resumes monitoring of the system.
service	Displays inventory collection settings and collects inventory.
serviceSettings	Configures the frequency of inventory collection.
start	Starts ESA.
status	Display agent status.
stop	Stops ESA.
supportProxySettings	Configures and displays Service and Support Proxy settings.
suspend	ESA suspends monitoring of the system.
test	Performs test operations for connectivity, notification, operations, and problem generation.

- Provide command help

This example illustrates running the **esacli help** command.

esacli help activity

Help for activity

Summary

Use the esacli activity command to display activity log entries for IBM Electronic Service Agent instance.

Synopsis

```
esacli activity [[-m count] | [{"-b start-date-time"} {"-e end-date-time"}]]
```

Description

The esacli activity command displays activity log entries for IBM Electronic Service Agent instance.

Options

```
-m | --max count
```

Specifies the maximum number of entries from the end of the activity

log to be displayed. A positive integer value must be specified. The entire activity log is displayed if this option is not specified.

- b | --begin date-timestamp
Specifies a date and time for the earliest entry from the activity log to be returned. The date and time may be specified using local conventions for specifying a date and time. Use help for this command to see a sample format for specifying a date and time value. The date and time can also be specified using ISO 8601 an international system for specifying dates and times. An ISO 8601 date and time should be expressed with the following format: YYYY-MM-DD HH:MM. The time is expressed using a 24 clock.
- e | --end date-timestamp
Specifies a date and time for the latest entry from the activity log to be returned. The date and time may be specified using local conventions for specifying a date and time. Use help for this command to see a sample format for specifying a date and time value. The date and time can also be specified using ISO 8601 an international system for specifying dates and times. An ISO 8601 date and time should be expressed with the following format: YYYY-MM-DD HH:MM. The time is expressed using a 24 clock.

Exit status

- 0 = The operation completed successfully.
- 1 = IBM Electronic Service Agent instance is not running.
- 10 = Unsupported option was specified. Option: {option}.
- 14 = A required option was not provided. Option: {option}.
- 18 = An option was set more than once. Option: {option}.
- 19 = An option value was not provided when required. Option: {option}.
- 29 = IBM Electronic Service Agent instance has not been activated.
- 31 = An integer value was not provided when required. Option: {name} Value: {value}.
- 32 = An integer value was not in the valid range. Option: {option value} Range: {min-max}.
- 41 = Invalid value specified: {value}. Value should be specified like {date format} for option {option}.
- 42 = Invalid value {value} specified for the {option} option.
- 45 = Mutually exclusive arguments used together.

Examples

1. List the last 6 entries in the activity log
This example illustrates running esacli activity to list the last 6 entries in the activity log.
> esacli activity -m 6
Activity log entries:
Jul 23, 2010 5:43:39 PM: Operational test successful.
Jul 22, 2010 8:59:28 PM: Software service information sent.
Jul 22, 2010 8:58:34 PM: Software service information collection initiated.
Jul 22, 2010 8:57:39 PM: Software service information sent.
Jul 22, 2010 8:55:40 PM: Hardware service information collection initiated.
Jul 22, 2010 8:56:34 PM: Software service information sent.
2. List the activity entries between two dates using a locale format.
This example illustrates running esacli activity to list the activity between two dates and times using a locale specific format.
> esacli activity -b "7/21/12 9:09 AM" -e "7/24/12 9:09 AM"
Activity log entries:
Jul 23, 2012 5:43:39 PM: Operational test successful.
Jul 22, 2012 8:59:28 PM: Software service information sent.
Jul 22, 2012 8:58:34 PM: Software service information collection initiated.
Jul 22, 2012 8:57:39 PM: Software service information sent.
Jul 22, 2012 8:55:40 PM: Hardware service information collection initiated.
Jul 22, 2012 8:56:34 PM: Software service information sent.

3. List the activity entries between two dates using a standard format. This example illustrates running `esacli` activity to list the activity between two dates using an ISO 8601 format.

```
> esacli activity -b 2012-07-21 -e 2012-07-24
```

Activity log entries:

```
Jul 23, 2012 5:43:39 PM: Operational test successful.
Jul 22, 2012 8:59:28 PM: Software service information sent.
Jul 22, 2012 8:58:34 PM: Software service information collection initiated.
Jul 22, 2012 8:57:39 PM: Software service information sent.
Jul 22, 2012 8:55:40 PM: Hardware service information collection initiated.
Jul 22, 2012 8:56:34 PM: Software service information sent.
```

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli ibmId

Use the `esacli ibmId` command to add IBM user IDs that can access the Electronic Service Agent support website to view status.

Synopsis

```
esacli ibmId -i {IBM user id list}
```

Description

The `esacli ibmId` command adds IBM user IDs that can access the Electronic Service Agent support website to view status.

Options

`-i` | `--ibmid`

Comma separated list of IBM user IDs to be granted access to the Electronic Service Agent website.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **14**: A required option was not provided. Option: {option}.
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **27**: An invalid IBM ID was specified. IBM ID: {id}

Example

- Set IBM user accounts

The example illustrates adding two user IDs to access the Electronic Service Agent website.

```
esacli ibmId -i "user1,user2"
```

The command completed successfully.

Related tasks:

“Providing IBM IDs” on page 40

An IBM ID is needed to view service information that was sent to the IBM Electronic Support website by IBM Electronic Service Agent. Service information

can be viewed on the IBM Electronic Support website.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli import

Use the **esacli import** command to import the configuration settings for the IBM Electronic Service Agent instance.

If the configuration settings being imported include values for all of the required options for the **esacli activate** command, then the IBM Electronic Service Agent instance will be activated as if the **esacli activate** command had been used.

Synopsis

```
esacli import {-f file_name}
```

Description

The **esacli import** command enables you to import the configuration settings for the IBM Electronic Service Agent instance from a file.

Options

-f | **--file** *file_name*

Specifies the name of a file from which the configuration settings are to be read. The **esacli export** command can be used to generate a file with the proper format for the **esacli import** command. The generated file includes comments documenting the various settings which can be changed. The file can specify either an absolute path or a path relative to the current working directory.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **14**: A required option was not provided. Option: {option}.
- **17**: The import operation failed. Reason: {Reason}
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **21**: An input file could not be read. Reason: {Reason}

Examples

- Successful import

This example illustrates running the **esacli import** command.

```
esacli import -f import.file
```

Related tasks:

“Configuring operational settings” on page 38

You can configure operational settings for IBM Electronic Service Agent to perform the functions that are important to your service environment.

“Importing a configuration” on page 40

You can import an IBM Electronic Service Agent configuration file so you can use the same contact and location information and operational settings as used on another system.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli interfaces

Use the **esacli interfaces** command to list the names of the network interfaces.

Synopsis

```
esacli interfaces
```

Description

The **esacli interfaces** command lists the names of the network interfaces. This command is used as an input source for input for the **esacli supportProxySettings** command.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: The IBM Electronic Service Agent instance is not running.

Example

- Lists interface

The example illustrates displaying the network interfaces.

```
esacli interfaces
# Interface IP Address
1 eth2      fe80:0:0:0:214:5eff:fe96:a4c6%4
2 eth2      2002:905:150e:251:214:5eff:fe96:a4c6%4
3 eth2      9.5.10.138
4 lo        0:0:0:0:0:0:0:1%1
5 lo        127.0.0.2
6 lo        127.0.0.1
```

Related tasks:

“Creating the IBM Service and Support proxy” on page 20

IBM Electronic Service Agent can function as a proxy server for other IBM Electronic Service Agent systems or partitions. This enables you to use another IBM Electronic Service Agent server with valid connectivity to IBM instead of a third-party proxy server. You can use IBM Electronic Service Agent graphical user interface to create the IBM Service and support proxy as your connection to the IBM Electronic Support website.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

“esacli supportProxySettings” on page 99

Use the **esacli supportProxySettings** command to set and display information that configures the Service and Support Proxy.

esacli locationSettings

Use the **esacli locationSettings** command to configure and display the system location information.

Synopsis

```
esacli locationSettings [-d [script]]
```

```
esacli locationSettings [-d [script]] {-c country} {-s state-or-province}  
{-z postal-code} {-m city} {-a address} {-b building}  
{-p phone}
```

Description

The **esacli locationSettings** command configures and displays the system location information. The **esacli locationSettings** command allows you to display and/or change the configuration settings for IBM Electronic Service Agent instance associated with the system location. All required fields must be entered to run this command. All optional fields not specified will be cleared. This command will indicate that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings will be displayed. This command will also display the current settings when run with only the display option or no option is specified.

Options

-d | **--display**

Specifies the setting values are to be displayed.

The optional script option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify locationSettings values, follow these steps:

1. Display the current locationSettings values by running the following command:

```
esacli locationSettings -d
```

Tip: You can display the help for the locationSettings command by running the following command: `esacli help locationSettings`.

2. Save the output of the locationSettings command to a file by running the following command:

```
esacli locationSettings -d script > locations.script
```

3. Edit the locations.script file to specify the desired values.
4. Change the locations.script file to an executable script file.
5. Run the locations.script file to set the locationSettings values on this or other systems.

-c | **--location.country** *country*

Specifies the name of the country or region for the system location. The country must be specified as a valid two letter code as defined by ISO-3166.

-s | **--location.state** *state*

Specifies the name of the state or province where the system is located. If the location country is set to the United States or Canada, then a valid state or province setting must be a valid 2 character state or province abbreviation.

-z | **--location.postal** *postal code*

Specifies the postal code where the system is located.

- m** | **--location.city** *city*
Specifies the name of the city where the system is located.
- a** | **--location.address** *address*
Specifies the address where the system is located.
- b** | **--location.building** *location*
Specifies the location where the system is located at an address.
- p** | **--location.phone** *phone*
Specifies the telephone number where the system is located. Valid United States and Canada telephone numbers must be 10 - 30 alphanumeric characters and cannot contain any dashes. Other telephone numbers can include any type of character but must be 5 - 30 characters in length.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **14**: A required option was not provided. Option: {option}.
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **23**: An invalid country or region was specified. Country: {country}.
- **24**: An invalid phone number was specified. Phone: {Phone}
- **25**: An invalid state or province was specified. State: {State}
- **26**: An invalid postal code: {code} for country code {country code} and state/province {state/province}
- **42**: Invalid value {value} specified for the {option} option.

Examples

- Display the current system location settings
This example illustrates running the **esacli locationSettings** to display the current settings.

```
esacli locationSettings -d
System Location
Country or region: United States
State or province: NY
Postal code: 12601
City: Poughkeepsie
Street address: 2455 South Rd
Building, floor, office: 707, 1M-71
Telephone number: 8005551212
```

- Set system location values
This example illustrates running the **esacli locationSettings** to set several values.

```
esacli locationSettings -a "2455 South Rd." -m "Poughkeepsie" -s "NY" -c "US"
-z "12601" -p "8455559464" -b "Building 707 Floor 2 Rm M71"
```

Related tasks:

“Specifying service contact information” on page 22
Specifying IBM Electronic Service Agent service contact information is the first step in preparing to connect to the IBM Electronic Support website.

Related reference:

“How to read syntax diagrams” on page 107
Review the conventions used in syntax diagrams to understand the command descriptions.

esacli logSettings

Use the **esacli logSettings** command to set and display information for the current logging level.

Synopsis

```
esacli logSettings [-d [script]]
```

```
esacli logSettings [-d [script]] {-l level}
```

Description

The **esacli logSettings** command sets and displays information for the current logging level. This command is used to set and display the logging level. This command will indicate that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings will be displayed. This command will also display the current settings when run with only the display option or no option is specified.

Options

-d | --display

Specifies the setting values are to be displayed.

The optional `script` option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify logSettings values, follow these steps:

1. Display the current logSettings values by running the following command:

```
esacli logSettings -d
```

Tip: You can display the help for the logSettings command by running the following command: `esacli help logSettings`.

2. Save the output of the logSettings command to a file by running the following command:

```
esacli logSettings -d script > log.script
```

3. Edit the `log.script` file to specify the desired values.
4. Change the `log.script` file to an executable script file.
5. Run the `log.script` file to set the logSettings values on this or other systems.

-l | --level Severe | Error | Warning | Information | Debug | Trace

Specifies the Electronic Service Agent logging level.

Exit status

The following table contains the codes that are returned by this command.

- **0:** The operation completed successfully.
- **1:** IBM Electronic Service Agent instance is not running.
- **10:** Unsupported option was specified. Option: {option}.
- **18:** An option was set more than once. Option: {option}.
- **19:** An option value was not provided when required. Option: {option}.
- **42:** Invalid value {value} specified for the {option} option.

Examples

- Lists logging level

```
esacli logSettings -d  
Logging Level: Error
```

- Sets logging level to Error
`esacli logSettings -l Error`

Related tasks:

“Setting the trace level” on page 56

Trace level determines the message severity that is recorded during IBM Electronic Service Agent activity.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli notificationSettings

Use the **esacli notificationSettings** to set and display information indicating where Electronic Service Agent will send notifications when errors occur.

Synopsis

```
esacli notificationSettings [[-d [script]]
```

```
esacli notificationSettings {-t email} [-e true] {-h hostname} {-p port} [-u userid]  
[-w password] {-l email-list}
```

```
esacli notificationSettings {-t SNMP} [-e true] {-h hostname} {-p port} {-c SNMP Community}
```

```
esacli notificationSettings {-a "email list"} |{-r "email list"}
```

Description

The **esacli notificationSettings** command sets and displays information indicating where Electronic Service Agent will send notifications when errors occur. This command will indicate that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings will be displayed. This command will also display the current settings when run with only the display option or no option is specified.

Options

-d | --display

Specifies the setting values are to be displayed.

The optional script option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify notificationSettings values, follow these steps:

1. Display the current notificationSettings values by running the following command:

```
esacli notificationSettings -d
```

Tip: You can display the help for the notificationSettings command by running the following command: `esacli help notificationSettings`.

2. Save the output of the notificationSettings command to a file by running the following command:

```
esacli notificationSettings -d script > notifications.script
```

3. Edit the notifications.script file to specify the desired values.

4. Change the `notifications.script` file to an executable script file.
 5. Run the `notifications.script` file to set the `notificationSettings` values on this or other systems.
- t** | **--type** *<email|SNMP>*
 Specifies which setting values are to be displayed or set. This command must be run two times for setting both the email and SNMP values.
- e** | **--enable** **true or false**
 Specifies if notification is enabled or not. The default is true.
- h** | **--hostname** *SMTP server or SNMP network manager host*
 Specifies an SMTP server hostname or a SNMP network manager host. A hostname or IP Address can be used.
- p** | **--port** *integer between 1 and 65535*
 Specifies an SMTP or SNMP server port.
- u** | **--userid** *user*
 Specifies a SMTP user account.
- w** | **--password** *password*
 Specifies an SMTP user password. The command will prompt for the password if the option but not the value is provided.
- l** | **--list** *email list*
 Specifies a comma-separated list of email addresses where notifications will be sent. This list will replace any existing emails.
- c** | **--community** *SNMP Community*
 Specifies a SNMP Community where SNMP traps will be sent.
- a** | **--add** *email address(es)*
 Specifies additional comma-separated email address(es) where emails will be sent. This option is mutually exclusive of other options.
- r** | **--delete** *email address(es)*
 Specifies comma-separated email address(es) to remove from the notification list. This option is mutually exclusive of other options.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **13**: An invalid host name was specified for a subcommand host option.
- **14**: A required option was not provided. Option: {option}.
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **22**: An invalid email address was specified. Email: {email} for option {option}.
- **31**: An integer value was not provided when required. Option: [name] Value: {value}.
- **32**: An integer value was not in the valid range. Option: {option value} Range: {min-max}.
- **42**: Invalid value {value} specified for the {option} option.
- **45**: Mutually exclusive arguments used together.
- **46**: Can not delete required information.
- **55**: Option {option} is not a valid option when {option} is set to {value}.

Examples

- Lists notification settings

```
esacli notificationSettings -d  
Notification Settings  
Send e-mail notifications  
Enabled: true  
SMTP service name: smtp.server.com  
Port: 25  
Userid: smtpu1  
Password: *****  
Addresses: user1@ibm.com, user2@ibm.com  
Send SNMP traps  
Enabled: true  
Target network manager host: snmp.host.com  
Community: snmp community  
Port: 162
```

- Set SNMP notification settings

```
esacli notificationSettings -t SNMP -e true -h snmp.gateway.com -p 162 -c "SNMP Community"
```

- Set email notification settings

```
esacli notificationSettings --type email --enable true  
--userid "smtpuser" -password "password" --hostname smtp.gateway.com --port 25 --list  
"email1@ibm.com,email2@ibm.com"
```

- Add an additional email recipient

```
esacli notificationSettings -add "email1@ibm.com"
```

Related tasks:

“Specifying notifications” on page 49

You can use notifications to send email and SNMP traps about IBM Electronic Service Agent activity to the locations you specify.

Related reference:

“esacli test” on page 102

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

esacli opNotificationSettings

Use the **esacli opNotificationSettings** to set and display information indicating where Electronic Service Agent sends notifications when operational tests are performed.

Synopsis

```
esacli opNotificationSettings [[-d [script]]]
```

```
esacli opNotificationSettings [-e true] {-h hostname} {-p port} [-u userid]  
[-w password] {-m email}
```

```
esacli opNotificationSettings {-e false}
```

Description

The **esacli opNotificationSettings** command sets and displays information indicating where Electronic Service Agent sends notifications when operational tests are performed. This command indicates that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings are displayed. This command also displays the current settings when run with only the display option or when no option is specified.

Note: This command should be run only when directed by IBM service and any email address which is set must end with `ibm.com`.

Options

-d | **--display**

Specifies the setting values are to be displayed.

The optional `script` option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify `opNotificationSettings` values, follow these steps:

1. Display the current `opNotificationSettings` values by running the following command:

```
esacli opNotificationSettings -d
```

Tip: You can display the help for the `opNotificationSettings` command by running the following command: `esacli help opNotificationSettings`.

2. Save the output of the `opNotificationSettings` command to a file by running the following command:

```
esacli opNotificationSettings -d script > opnotifications.script
```

Note: For Windows systems, create a batch file in the following format:

esacli opNotificationSettings -d script > opnotifications.bat.

3. Edit the `opnotifications.script` file to specify the wanted values.
4. Change the `opnotifications.script` file to an executable script file.
5. Run the `opnotifications.script` file to set the `opNotificationSettings` values on this or other systems.

-e | **--enable** *true or false*

Specifies if notification is enabled or not. The default is `true`.

-h | **--hostname** *SMTP server host*

Specifies an SMTP server hostname. A hostname or IP Address can be used.

-p | **--port** *port*

Specifies an SMTP server port.

-u | **--userid** *user*

Specifies an SMTP user account.

-w | **--password** *password*

Specifies an SMTP user password. The command prompts for the password if the option is specified but the value is not provided.

-m | **--email** *email address*

Specifies an email where operational test notifications are sent. This email address must end with `ibm.com`.

Exit status

The following table contains the codes that are returned by this command.

- **0:** The operation completed successfully.
- **1:** IBM Electronic Service Agent instance is not running.
- **10:** Unsupported option was specified. Option: {option}
- **13:** An invalid host name was specified for a subcommand host option.
- **14:** A required option was not provided. Option: {option}
- **18:** An option was set more than once. Option: {option}

- **19:** An option value was not provided when required. Option: {option}
- **22:** An invalid email address was specified. Email: {email} for option {option}
- **31:** An integer value was not provided when required. Option: {name} Value: {value}
- **32:** An integer value was not in the valid range. Option: {option value} Range:{min-max}
- **42:** Invalid value {value} specified for the {option} option.

Examples

- Lists operational notification settings

```
esacli opNotificationSettings -d
Operational Settings
Send e-mail notifications
Enabled: true
SMTP service name: smtp.server.com
Port: 25
Userid: smtpu1
Password: *****
Address: user1@ibm.com
```

- Set operational notification settings

```
esacli opNotificationSettings --enable true
--userid "smtpuser" --password "password" --hostname smtp.gateway.com
--port 25 --email email@ibm.com
```

esacli opTestSettings

Use the **esacli opTestSettings** command to set and display information indicating when Electronic Service Agent attempts to perform an automatic operational test.

Synopsis

```
esacli opTestSettings [[-d [script]]]
```

```
esacli opTestSettings [-e true] {-x time} {-i interval in days}
```

```
esacli opTestSettings {-e false}
```

Description

The **esacli opTestSettings** command sets and displays information indicating when Electronic Service Agent attempts to perform an automatic operational test to IBM servers.

Options

-d | --display

Specifies the setting values that must be displayed.

The optional script option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify opTestSettings values, follow these steps:

1. Display the current opTestSettings values by running the following command:

```
esacli opTestSettings -d
```

Tip: You can display the help for the **opTestSettings** command by running the **esacli help opTestSettings** command.

2. Save the output of the **opTestSettings** command to a file by running the following command:

```
esacli opTestSettings -d script > optest.script
```

Note: For Windows systems, create a batch file in the following format:

```
esacli opTestSettings -d script > optest.bat
```

3. Edit the `optest.script` file to specify the required values.
4. Change the `optest.script` file to an executable script file.
5. Run the `optest.script` file to set the `opTestSettings` values on this or other systems.

-e | **--enable** *true or false*

Specifies if the operational test is enabled or not. The default value is true.

-i | **--interval** *days*

Number of days between operational tests. Must be a value between 1-21.

-x | **--time** *test time*

Specifies when the test should be run in 15 minute intervals. The format of the time uses the ISO 8601 standard. It is expressed as HH:MM using a 24 hour clock. Times are rounded to 15 minute intervals.

Exit status

The following table contains the codes that are returned by this command.

- **0:** The operation completed successfully.
- **1:** IBM Electronic Service Agent instance is not running.
- **10:** Unsupported option was specified. Option: {option}
- **14:** A required option was not provided. Option: {option}
- **18:** An option was set more than once. Option: {option}
- **19:** An option value was not provided when required. Option: {option}
- **31:** An integer value was not provided when required. Option: {name} Value: {value}
- **32:** An integer value was not in the valid range. Option: {option value} Range:{min-max}
- **42:** Invalid value {value} specified for the {option} option.

Examples

- Lists operational test settings

```
esacli opTestSettings -d  
Operational test  
Automatically test connection to IBM support  
Enabled: true  
Interval: 10 days  
Scheduled time: 15:00
```

- Set operational test settings

```
esacli opTestSettings --enable "true" --interval "11" --time "10:00"  
The operation completed successfully.
```

esacli problem

Use the **esacli problem** command to work with problems for the IBM Electronic Service Agent instance.

Synopsis

```
esacli problem [-i {id}] [-d | -u]]
```

Description

The **esacli problem** command enables you to work with problems for the IBM Electronic Service Agent instance. If a problem ID or service request ID is provided, then the operation performed is specific to the problem identified by the problem ID. Otherwise, the list of all open problems is displayed.

Options

- d | --delete**
Specifies that the problem is to be deleted.
- i | --id *id***
Specifies the problem ID or service request ID of the problem for which information is to be displayed or deleted.
- u | --update**
Specifies that an update of the service request status for the problem should be retrieved.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **37**: Invalid problem ID specified.
- **38**: Problem deletion failed.
- **39**: Problem update failed.
- **45**: Mutually exclusive arguments used together.

Examples

- List problems

This example illustrates running the **esacli problem** command to list the problem summary.

```
esacli problem  
Problem list:
```

```
Problem 139e0629965-1573f832:  
  Status:          Open  
  Service request: 28507379000
```

- Display problem details

This example illustrates running the **esacli problem** command to display details for a problem.

```
esacli problem -i 139e0629965-1573f832
```

```
Problem information:  
  Problem ID:          139e0629965-1573f832  
  Service request:     28507379000  
  Status:              Open  
  Is test problem:     Yes  
  Problem description: Test symptom generated by Electronic Service Agent  
  Problem severity:    2  
  Problem occurrence date/time: Wed Sep 19 16:15:21 CDT 2012  
  Extended problem data:  
  Extended problem data available: No  
  Service request status: Open  
  Problem sent:        Yes
```

Number of attempts:	1
Last changed:	Wed Sep 19 16:15:37 CDT 2012
Error code:	ElectronicService.Test

- Delete a problem

This example illustrates running the **esacli problem** command to delete a problem.

```
esacli problem -i 12a0068d6d9-28094f01 -d
```

Problem with local problem ID or service request 12a0068d6d9-28094f01 deleted successfully.

Related tasks:

“Displaying problem information” on page 30

The **All Problems** pane displays all the problems (service requests) for systems that are monitored by IBM Electronic Service Agent.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli problemSettings

Use the **esacli problemSettings** command to set and display information about how frequently Electronic Service Agent attempts to call a problem home when it is not initially successful at calling home the problem.

Synopsis

```
esacli problemSettings [[-d [script]]]
```

```
esacli problemSettings {-r true|false} {-i minutes} {-n number of re-tries}
```

Description

The **esacli problemSettings** command sets and displays information about how frequently Electronic Service Agent attempts to call a problem home when it is not initially successful at calling home the problem. This command will indicate that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings will be displayed. This command will also display the current settings when run with only the display option or no option is specified.

Options

-d | --display

Specifies the setting values are to be displayed.

The optional `script` option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify `problemSettings` values, follow these steps:

1. Display the current `problemSettings` values by running the following command:

```
esacli problemSettings -d
```

Tip: You can display the help for the `problemSettings` command by running the following command: `esacli help problemSettings`.

2. Save the output of the `problemSettings` command to a file by running the following command:

```
esacli problemSettings -d script > problems.script
```

3. Edit the `problems.script` file to specify the desired values.
4. Change the `problems.script` file to an executable script file.
5. Run the `problems.script` file to set the `problemSettings` values on this or other systems.

-r | --retry{true or false }

Specifies whether Electronic Service Agent should re-try action to perform when reporting a problem fails.

-i | --interval interval{integer between 15 and 720}

Specifies number of minutes to wait before retrying.

-n | --numtries{[integer | unlimited]}

Specifies number of times Electronic Service Agent should re-try to report a problem. The value can also be specified as unlimited.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **14**: A required option was not provided. Option: {option}.
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **31**: An integer value was not provided when required. Option: [name] Value: {value}.
- **32**: An integer value was not in the valid range. Option: {option value} Range: {min-max}.
- **42**: Invalid value {value} specified for the {option} option.

Examples

- List problem information settings

```
esacli problemSettings -d
```

```
Problem information
```

```
Retry:                true
Interval in minutes: 10
Number of times:      300
```

- Set problem information settings

```
esacli problemSettings --retry true --interval 300 --numtries 3
```

Related tasks:

“Configuring problem reporting” on page 45

You can specify that IBM Electronic Service Agent continue to attempt to report a problem if initial transmission fails. You can also configure the frequency and number of times IBM Electronic Service Agent attempts to report a problem.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli resume

Use the **esacli resume** command to resume monitoring of the system by Electronic Service Electronic Service Agent.

Synopsis

`esacli resume`

Description

The **esacli resume** command enables you to resume monitoring of the system by Electronic Service Agent.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.

Example

- Resuming Electronic Service Agent

This example illustrates running **esacli resume** to resume Electronic Service Agent.

```
esacli resume
```

```
The system is being monitored.
```

Related tasks:

“Stopping and starting IBM Electronic Service Agent” on page 59

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to stop or start IBM Electronic Service Agent.

“Disabling IBM Electronic Service Agent” on page 60

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to disable IBM Electronic Service Agent.

“Suspending and resuming IBM Electronic Service Agent” on page 58

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to suspend or resume IBM Electronic Service Agent.

Related reference:

“esacli start” on page 97

Use the **esacli start** command to start Electronic Service Agent.

“esacli stop” on page 98

Use the **esacli stop** command to stop Electronic Service Agent.

“esacli suspend” on page 101

Use the **esacli suspend** command to suspend Electronic Service Agent.

esacli service

Use the **esacli service** command to immediately send inventory to IBM.

Synopsis

```
esacli service [-d]
```

```
esacli service {-t type} {-c}
```

Description

The **esacli service** command immediately sends inventory information to IBM when invoked with the `--type` and `collect` options. When invoked with only `display` option, the current settings for inventory collection are displayed.

Options

- d | --display**
Specifies the setting values are to be displayed.
- c | --collect**
Triggers an inventory collection.
- t | --type *type of service information***
Specifies the type of service information that is collected. Options are `hardware`, `software`, `sysconfig` or "system configuration" and `perfmgmt` or "performance management".

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **10**: Unsupported option was specified. Option: {option}.
- **14**: A required option was not provided. Option: {option}.
- **18**: An option was set more than once. Option: {option}.
- **19**: An option value was not provided when required. Option: {option}.
- **42**: Invalid value {value} specified for the {option} option.
- **49**: The {collector} collector did not start. Reason: {Reason}

Example

- List service information

```
esacli service -t Hardware -c
```

The hardware collector has been started, and will complete in approximately 2-15 minutes. Please check the activity log to view the results.

Related tasks:

"Collecting and sending service information" on page 36

IBM Electronic Service Agent collects and sends service information to IBM. Service information consists of hardware, software, system configuration, and performance management information about the system being monitored by IBM Electronic Service Agent.

Related reference:

"How to read syntax diagrams" on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli serviceSettings

Use the **esacli serviceSettings** command to set and display information about the types of inventory that is collected and the schedule for sending that inventory to IBM.

Synopsis

```
esacli serviceSettings {-t type} [-d [script]]
```

```
esacli serviceSettings {-t type} {-e false}
```

```
esacli serviceSettings {-t type} [-e true] {-x time} {-f frequency} [-g day-of-the-week]
[-m day-of-the-month] [-q month-of-the-quarter]
```

Description

The **esacli serviceSettings** command sets and displays types of inventory that is collected and the schedule for collecting the information. Times values are rounded to 15-minute intervals. This command will indicate that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings will be displayed. This command will also display the current settings when run with only the display option or no option is specified.

Options

-d | --display

Specifies the setting values are to be displayed.

The optional script option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify serviceSettings values, follow these steps:

1. Display the current serviceSettings values by running the following command:

```
esacli serviceSettings -d
```

Tip: You can display the help for the serviceSettings command by running the following command: `esacli help serviceSettings`.

2. Save the output of the serviceSettings command to a file by running the following command:

```
esacli serviceSettings -d script > services.script
```

3. Edit the services.script file to specify the desired values.
4. Change the services.script file to an executable script file.
5. Run the services.script file to set the serviceSettings values on this or other systems.

-e | --enable true or false

Specifies whether inventory collection is enabled. The default value is true.

-f | --frequency {daily | weekly | monthly | quarterly}

Specifies how frequently inventory is collected. The words are case insensitive. If the type option is set to `perfmgmt` or "Performance management", `daily` must be specified for this option.

-g | --dayofweek *Day of the Week*

If frequency is `Weekly`, specifies the day of the week. Locale info can be used for different starts of the week, such as `Monday Tuesday, Wednesday`, and so on.

-m | --dayofmonth 1-28

If frequency is `Monthly`, specifies the day of the month.

-q | --monthofquarter 1-3

If frequency is `Quarterly`, specifies the month of the quarter.

-t | --type *type of service information*

Specifies the type of service information that is collected. Options are `hardware`, `software`, `sysconfig` or "system configuration", and `perfmgmt` or "performance management".

Note: Performance management information is collected daily.

-x | **--time** *collection time*

Specifies when the inventory is collected in 15-minute intervals. The format of the time uses the ISO 8601 standard. It is expressed as HH:MM using a 24 hour clock. Times will be rounded to 15-minute intervals.

Exit status

The following table contains the codes that are returned by this command.

- **0:** The operation completed successfully.
- **1:** IBM Electronic Service Agent instance is not running.
- **10:** Unsupported option was specified. Option: {option}.
- **14:** A required option was not provided. Option: {option}.
- **18:** An option was set more than once. Option: {option}.
- **19:** An option value was not provided when required. Option: {option}.
- **31:** An integer value was not provided when required. Option: [name] Value: {value}.
- **32:** An integer value was not in the valid range. Option: {option value} Range: {min-max}.
- **41:** Invalid value specified: {value}. Value should be specified like {date format} for option {option}.
- **42:** Invalid value {value} specified for the {option} option.
- **55:** Option {option} is not a valid option when {option} is set to {value}.

Examples

- List service settings information

```
esacli serviceSettings -d -t Hardware
```

```
Service information
```

```
Hardware
```

```
Enabled: true
```

```
Collection time: 11:15
```

```
Frequency: Quarterly
```

```
Collection month of quarter: First
```

```
Collection day of month: 1
```

- Set service settings information

```
esacli serviceSettings -t hardware -e true -x 13:15 -f daily
```

```
esacli serviceSettings -t hardware -e true -x 13:15 -f weekly -g Monday
```

```
esacli serviceSettings -t hardware -e true -x 13:15 -f monthly -m 28
```

```
esacli serviceSettings -t software -e true -x 13:15 -f quarterly -q 1 -m 14
```

Related tasks:

“Configuring performance management information collection” on page 47

You can enable IBM Electronic Service Agent to collect performance management information and specify the collection time.

“Configuring service information collection” on page 46

You can specify the type of information that you want IBM Electronic Service Agent to collect, and the time and frequency for the collection.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli start

Use the **esacli start** command to start Electronic Service Agent.

Synopsis

```
esacli start
```

Description

The **esacli start** command enables you to start Electronic Service Agent.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **43**: IBM Electronic Service Agent is already active.
- **44**: IBM Electronic Service Agent did not start.
- **52**: Administrator privileges needed to run this command.

Example

- Starting the Electronic Service Agent

This example illustrates running **esacli start** to start the Electronic Service Agent.

```
esacli start
```

The system is being monitored.

Related tasks:

“Stopping and starting IBM Electronic Service Agent” on page 59

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to stop or start IBM Electronic Service Agent.

“Disabling IBM Electronic Service Agent” on page 60

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to disable IBM Electronic Service Agent.

“Suspending and resuming IBM Electronic Service Agent” on page 58

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to suspend or resume IBM Electronic Service Agent.

Related reference:

“esacli stop” on page 98

Use the **esacli stop** command to stop Electronic Service Agent.

“esacli suspend” on page 101

Use the **esacli suspend** command to suspend Electronic Service Agent.

“esacli resume” on page 92

Use the **esacli resume** command to resume monitoring of the system by Electronic Service Agent.

esacli status

Use the **esacli status** command to display the status of the IBM Electronic Service Agent instance.

Synopsis

```
esacli status
```

Description

The **esacli status** command enables you to display the status of the IBM Electronic Service Agent instance.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: The IBM Electronic Service Agent instance is not active.
- **10**: Unsupported option was specified.
- **29**: The IBM Electronic Service Agent instance has not been activated.
- **30**: The IBM Electronic Service Agent instance is currently suspended.

Examples

- Status after activation

This example illustrates running the **esacli status** command successfully.

```
esacli status
```

```
The system is being monitored.
```

```
System properties:
```

```
Name:          spartacus
Type:          9117
Model:         MMA
Serial Number: 10F94EB
Manufacturer:  IBM
Partition ID:  4
Operating System: linux
Entity ID:     EPS/B0UB10829163
Product Version: 2.1.0.0 vpl-2.1.gwsa120824
```

Related tasks:

“Checking status” on page 57

You can check whether IBM Electronic Service Agent is monitoring your system.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli stop

Use the **esacli stop** command to stop Electronic Service Agent.

Synopsis

```
esacli stop
```

Description

The **esacli stop** command enables you to stop Electronic Service Agent.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.

- **1:** IBM Electronic Service Agent instance is not running.
- **52:** Administrator privileges needed to run this command.

Example

- Stopping Electronic Service Agent

This example illustrates running **esacli stop** to stop Electronic Service Agent.

```
esacli stop
```

```
IBM Electronic Service Agent was stopped.
```

Related tasks:

“Stopping and starting IBM Electronic Service Agent” on page 59

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to stop or start IBM Electronic Service Agent.

“Disabling IBM Electronic Service Agent” on page 60

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to disable IBM Electronic Service Agent.

“Suspending and resuming IBM Electronic Service Agent” on page 58

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to suspend or resume IBM Electronic Service Agent.

Related reference:

“esacli start” on page 97

Use the **esacli start** command to start Electronic Service Agent.

“esacli suspend” on page 101

Use the **esacli suspend** command to suspend Electronic Service Agent.

“esacli resume” on page 92

Use the **esacli resume** command to resume monitoring of the system by Electronic Service Electronic Service Agent.

esacli supportProxySettings

Use the **esacli supportProxySettings** command to set and display information that configures the Service and Support Proxy.

Synopsis

```
esacli supportProxySettings [-d [script]]
```

```
esacli supportProxySettings {-e false}
```

```
esacli supportProxySettings [-d [script]] [-e true] [-i interface] {-p port}  
[-u user] [-w password]
```

Description

The **esacli supportProxySettings** command sets and displays information that configures the Service and Support Proxy. This command will indicate that it completed successfully with a message: This command completed successfully. When the display option is specified, the new settings will be displayed. This command will also display the current settings when run with only the display option or no option is specified.

Options

-d | --display

Specifies the setting values are to be displayed.

The optional script option generates this command containing all the current values, which can be used for updates. For example, to create an executable script file that you can use to specify supportProxySettings values, follow these steps:

1. Display the current supportProxySettings values by running the following command:

```
esacli supportProxySettings -d
```

Tip: You can display the help for the supportProxySettings command by running the following command: `esacli help supportProxySettings`.

2. Save the output of the supportProxySettings command to a file by running the following command:

```
esacli supportProxySettings -d script > proxy.script
```

3. Edit the proxy.script file to specify the desired values.
4. Change the proxy.script file to an executable script file.
5. Run the proxy.script file to set the supportProxySettings values on this or other systems.

-e | --enable true or false

Specifies whether the service and support proxy is enabled.

-i | --interface any | *name of interface*

Specifies a network interface to use. Use the **esacli interfaces** command to list the names of the network interfaces. If this option is not specified, the Service and Support proxy will be configured with any interface.

-p | --port *integer between 1 and 65535*

Specifies a proxy server port.

-u | --userid *user*

Specifies a proxy user ID. If used, Basic HTTP authentication is enabled.

-w | --password *password*

Specifies a proxy password. If used, Basic HTTP authentication is enabled. The command will prompt for the password if the option but not the value is provided.

Exit status

The following table contains the codes that are returned by this command.

- **0:** The operation completed successfully.
- **1:** IBM Electronic Service Agent instance is not running.
- **10:** Unsupported option was specified. Option: {option}.
- **14:** A required option was not provided. Option: {option}.
- **18:** An option was set more than once. Option: {option}.
- **19:** An option value was not provided when required. Option: {option}.
- **31:** An integer value was not provided when required. Option: [name] Value: {value}.
- **32:** An integer value was not in the valid range. Option: {option value} Range: {min-max}.
- **42:** Invalid value {value} specified for the {option} option.
- **56:** Interface {interface} not valid. Reason: {reason}.

Examples

- Lists service and support proxy settings

esacli supportProxySettings -d

```
Service and support proxy
Interface:                Any
Server port:              5555
Require HTTP basic authentication: true
User name:                user11
Password:                 *****
```

- Sets service and support proxy settings using any interface

```
esacli supportProxySettings -e true -p 5026
```

```
esacli supportProxySettings -e true -p 5026 -u user1 -w password
```

- Sets service and support proxy settings with an interface name

```
esacli supportProxySettings -e true -i "eth0" -p 5026 -u user1 -w password
```

- Sets service and support proxy settings using a list of numbers

```
esacli supportProxySettings -e true -i "1,2" -p 5026 -u user1 -w password
```

These numbers were determined by running the **esacli interfaces** command.

Related tasks:

“Creating the IBM Service and Support proxy” on page 20

IBM Electronic Service Agent can function as a proxy server for other IBM Electronic Service Agent systems or partitions. This enables you to use another IBM Electronic Service Agent server with valid connectivity to IBM instead of a third-party proxy server. You can use IBM Electronic Service Agent graphical user interface to create the IBM Service and support proxy as your connection to the IBM Electronic Support website.

Related reference:

“esacli interfaces” on page 80

Use the **esacli interfaces** command to list the names of the network interfaces.

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

esacli suspend

Use the **esacli suspend** command to suspend Electronic Service Agent.

Synopsis

```
esacli suspend
```

Description

The **esacli start** command enables you to suspend monitoring of the system by Electronic Service Agent.

Exit status

The following table contains the codes that are returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **30**: IBM Electronic Service Agent instance is currently suspended.

Example

- Suspending Electronic Service Agent

This example illustrates running **esacli suspend** to suspend Electronic Service Agent.

esacli suspend

The system is NOT being monitored. IBM Electronic Service Agent is currently suspended.

Related tasks:

“Stopping and starting IBM Electronic Service Agent” on page 59

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to stop or start IBM Electronic Service Agent.

“Disabling IBM Electronic Service Agent” on page 60

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to disable IBM Electronic Service Agent.

“Suspending and resuming IBM Electronic Service Agent” on page 58

IBM Electronic Service Agent is automatically started when the activation process is complete. However, there might be times when you need to suspend or resume IBM Electronic Service Agent.

Related reference:

“esacli start” on page 97

Use the **esacli start** command to start Electronic Service Agent.

“esacli stop” on page 98

Use the **esacli stop** command to stop Electronic Service Agent.

“esacli resume” on page 92

Use the **esacli resume** command to resume monitoring of the system by Electronic Service Electronic Service Agent.

esacli test

Use the **esacli test** command to perform test operations for the IBM Electronic Service Agent instance.

Synopsis

```
esacli test {-c | -o | -p | -n}
```

Description

The **esacli test** command enables you to perform a test operation for the IBM Electronic Service Agent instance.

Options

-c | --connectivity

Specifies that a connectivity test is to be performed.

-o | --operational

Specifies that an operational test is to be performed.

-p | --problem

Specifies that creation of a test problem is to be performed.

-n | --notification

Specifies that a notification test is to be performed.

Tip: Run the **esacli notificationSettings** command to enable notifications before performing a notification test. For information, see “esacli notificationSettings” on page 84.

Exit status

The following table contains the codes that are returned by this command.

- **0:** The operation completed successfully.
- **1:** The IBM Electronic Service Agent instance is not active.
- **10:** Unsupported option was specified.
- **14:** A required option was not provided.
- **18:** An option was set more than once. Option: {option}.
- **29:** The IBM Electronic Service Agent instance has not been activated.
- **33:** Connectivity test failed.
- **34:** More than one required option was specified.
- **35:** Operational test failed.
- **36:** Test problem creation failed.
- **45:** Mutually exclusive arguments used together.

Examples

- Connectivity test

This example illustrates running the **esacli test** command to perform a connectivity test.

esacli test -c

```
Performing Connectivity Verification Test
success Bulk_Data_1          www6.software.ibm.com      170.225.15.41    443
success Bulk_Data_2          www.ecurep.ibm.com         192.109.81.20    443
success Gateway_1            eccgw01.boulder.ibm.com   207.25.252.197  443
success Gateway_2            eccgw02.rochester.ibm.com 129.42.160.51    443
success Problem_Report_1     www-945.ibm.com            129.42.26.224   443
success Problem_Report_2     www-945.ibm.com            129.42.34.224   443
success Problem_Report_3     www-945.ibm.com            129.42.42.224   443
success SP_Config_1          www.ibm.com                 129.42.56.216   443
success SP_Config_2          www.ibm.com                 129.42.58.216   443
success SP_Config_3          www.ibm.com                 129.42.60.216   443
success SP_Config_4          www-03.ibm.com             204.146.30.17   443
success SP_Config_5          www.ibm.com                 129.42.56.216   80
success SP_Config_6          www.ibm.com                 129.42.58.216   80
success SP_Config_7          www.ibm.com                 129.42.60.216   80
success SP_Config_8          www-03.ibm.com             204.146.30.17   80
15 successes
0 failures
Connectivity Verification Test Results: succeeded
```

- Operational test

This example illustrates running the **esacli test** command to perform an operational test.

esacli test -o

The operational test has been completed successfully.

- Create test problem

This example illustrates running the **esacli test** command to create a test problem.

esacli test -p

Test problem created successfully with problem ID 12ce558daaf-3d3ed62a.

- Notification test

This example illustrates running the **esacli test** command to create a test notification.

```
esacli test -n
Test notification sent successfully.
```

Related tasks:

“Creating the IBM Service and Support proxy” on page 20

IBM Electronic Service Agent can function as a proxy server for other IBM Electronic Service Agent systems or partitions. This enables you to use another IBM Electronic Service Agent server with valid connectivity to IBM instead of a third-party proxy server. You can use IBM Electronic Service Agent graphical user interface to create the IBM Service and support proxy as your connection to the IBM Electronic Support website.

“Running an operational test” on page 35

Check to see whether your connection and the transmission of service information to the IBM Electronic Support website is working correctly.

“Configuring operational tests” on page 48

You can specify that IBM Electronic Service Agent regularly test the connection and transmission of service information to the IBM Electronic Support website.

“Sending a test problem” on page 34

Send a test problem to the IBM Electronic Support website to see whether the problem reporting function is working correctly.

“Collecting and sending service information” on page 36

IBM Electronic Service Agent collects and sends service information to IBM. Service information consists of hardware, software, system configuration, and performance management information about the system being monitored by IBM Electronic Service Agent.

“Specifying notifications” on page 49

You can use notifications to send email and SNMP traps about IBM Electronic Service Agent activity to the locations you specify.

Related reference:

“How to read syntax diagrams” on page 107

Review the conventions used in syntax diagrams to understand the command descriptions.

“esacli notificationSettings” on page 84

Use the **esacli notificationSettings** to set and display information indicating where Electronic Service Agent will send notifications when errors occur.

Troubleshooting IBM Electronic Service Agent

Follow these general troubleshooting guidelines when you monitor IBM Electronic Service Agent.

Change the SNMP listener port on the ESA system

If the default SNMP listener port (5028) on ESA system is unavailable, you can change it to any other port available. Follow the steps to change the port number:

1. Edit the file `/opt/ibm/esa/workspace/.metadata/.plugins/com.ibm.esa.core/config/snmp.listener.settings.*`.

Note: If there are multiple files, select the file with the recent time stamp.

2. Modify the value for the `snmplistener.port`. By default, the value is 5028, as shown in the code here -

```
property name="snmplistener.port" type="java.lang.Integer">5028
```

For example:


```
property name="snmplistener.port" type="java.lang.Integer">5030
```

3. Restart Electronic Service Agent.
4. Rediscover each of the system so that the new port is updated on each of the endpoints.

Note: Alternatively, you can also use the **unsubscribe** & **subscribe** commands on each of the discovered KVM hosts.

Change the SNMP listener community on the ESA system

You can change the default community of the SNMP listener through the following steps:

1. Edit the file `/opt/ibm/esa/workspace/.metadata/.plugins/com.ibm.esa.core/config/snmp.listener.settings.*`.

Note: If there are multiple files, select the file with the recent time stamp.

2. Modify the value for the `snmplistener.community`. By default, the value is public, as shown in the code here -

```
property name="snmplistener.community"
type="java.lang.String">publicproperty name="snmplistener.community"
type="java.lang.String">public
```

For example:

```
property name="snmplistener.community"
type="java.lang.String">publicproperty name="snmplistener.community"
type="java.lang.String">communityname
```

3. Restart Electronic Service Agent.
4. Rediscover each of the system so that the new port is updated on each of the endpoints.

Note: Alternatively, you can also use the **unsubscribe** & **subscribe** commands on each of the discovered KVM hosts.

Discovery action failed as name or service not known

You might get this error, if there is an issue with system configuration. For SSH to work, the system must resolve its own host name. Follow these steps to make the system reachable to its host name:

1. Log in to the respective system.
2. Open the `etc/hosts` file.
3. Map the system's host name to its IP address. For example:

```
10.10.10.10 indesa.ind.ibm.com
```

Set the IBM Electronic Service Agent trace level

Adjusting the trace level using the IBM Electronic Service Agent graphical interface enables you to set the message severity that is recorded during IBM Electronic Service Agent activity. Working with an IBM Support representative to analyze the messages might help you diagnose problems. If the trace level is set to Severe or Error, you might want to change it to Warning or Information to gather more information about the problem. For more information, see "Setting the trace level" on page 56.

View the activity log to see whether there are problems recorded

The activity log shows the date and time a problem occurred, as well as a description of the problem. See “Displaying the activity log” on page 37.

If a problem occurs when the system attempts to electronically send a problem or service information to the IBM Electronic Support website, there are many possible reasons why the transmission might not have been successful. IBM Electronic Service Agent is dependent on functions of the operating system to be working correctly. This includes managing the IBM Electronic Service Agent daemon and system connectivity. Normal system problem determination is recommended for this type of problem.

Verifying that service information was sent to the IBM Electronic Support website

Service information collection activity shows the type of service information collected, when it was last collected, and when it was last sent.

If service information is currently being collected or transmitted, the last collected and last sent activity will not show until the tasks are completed.

The tasks of collecting service information and sending service information take time to run. The time needed to collect and send information is influenced by the size of the system, processing load, and the speed of the connection. Here is a summary of the collection and transmission process.

1. A collection task collects new service information.
2. After the collection is complete, a task is started to perform the following steps:
 - a. Start the connection profile
 - b. Connect to the IBM Electronic Support website
 - c. Send the service information

To verify that the information was sent to the IBM Electronic Support website, see “Displaying the activity log” on page 37.

Problems opening the IBM Electronic Service Agent graphical user interface

If you cannot access the IBM Electronic Service Agent graphical user interface, follow these steps:

1. Log in to the system as root.
2. Check whether IBM Electronic Service Agent is active on the system by entering the following command:
service esactl status.
The IBM Electronic Service Agent status is displayed.
3. If IBM Electronic Service Agent is not active, enter the following command to start IBM Electronic Service Agent:
service esactl start
4. If IBM Electronic Service Agent is not active and still cannot access the graphical user interface, enter the following command to check whether a firewall is blocking the port:

```
/opt/ibm/esa/bin/esafirewall status
```

The status of the firewall is displayed. For example:

```
# /opt/ibm/esa/bin/esafirewall status
Firewall is friendly with ESA UI (port =1025).
```

5. If the firewall is not friendly, add a new firewall rule by entering the following command:

```
/opt/ibm/esa/bin/esafirewall enable
```

Getting support for IBM Electronic Service Agent

You can post questions about any of the IBM Service and Productivity Tools, including IBM Electronic Service Agent, on the developerWorks® PowerLinux Community at the following web address:

<https://www.ibm.com/developerworks/mydeveloperworks/groups/service/forum/topics?communityUuid=fe313521-2e95-46f2-817d-44a4f27eba32>

For issues or problems with IBM Electronic Service Agent for PowerLinux, contact your hardware service provider via 1-800-IBM-SERV. Your problem will be addressed by the IBM Electronic Service Agent support team.

Related tasks:

“Displaying the activity log” on page 37

Displaying the activity log enables you to see all IBM Electronic Service Agent activity for a designated time period.

“Configuring service information collection” on page 46

You can specify the type of information that you want IBM Electronic Service Agent to collect, and the time and frequency for the collection.

“Setting the trace level” on page 56

Trace level determines the message severity that is recorded during IBM Electronic Service Agent activity.

Reference information

This section includes additional reference materials related to IBM Electronic Service Agent.

How to read syntax diagrams

Review the conventions used in syntax diagrams to understand the command descriptions.

Syntax diagrams consist of options, option arguments, and operands.

Options

Options indicate input that affects the behavior of the base command (for example, `-l` specifies long output) or required input that you can specify in different ways (for example, you can target objects using either `-n name` OR `-N groupname` OR `-ac objectclass`). Options consist of either a hyphen and single letter (for example, `-h`) or two hyphens and multiple letters (for example, `--help`). The single letter format is the short form of the multiple letter format, and the two formats are functionally interchangeable when issuing a command.

Option arguments

Some options are followed by one or more *option arguments* that specify a value for the option. For example, with `-file file_name`, `file_name` specifies the name of the file on or with which to take action.

Operands

Operands are parameters at the end of a command that specify required user input.

Syntax diagrams adhere to the following conventions:

- Options and operands that are enclosed in brackets ([]) are optional. Do not include these brackets in the command.
- Options and operands that are enclosed in braces ({}) are required. Do not include these braces in the command.
- Options and operands that are not enclosed in either brackets or braces are required.
- Operands and option arguments that are italicized must be replaced with actual values.
- The names of options are case sensitive and must be typed exactly as shown.
- Options preceded by two dashes (--) must be specified in their entirety.
- A pipe (|) character signifies that you can or must, depending on the enclosing characters, choose one option or the other. For example, [a | b] indicates that you can choose either a or b, but not both. Similarly, {a | b} indicates that you must choose either a or b.
- An ellipsis (...) signifies that you can repeat the operand and option argument on the command line.
- A dash (-) represents standard output.

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