

IBM Systems



# IBM Electronic Service Agent for Linux and Windows User's Guide

*Version 7.1.5*



IBM Systems



# IBM Electronic Service Agent for Linux and Windows User's Guide

*Version 7.1.5*

**Note**

Before using this information and the product it supports, read the information in "Notices" on page 93.

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## Chapter 1. IBM Electronic Service Agent for Linux and Windows

IBM® Electronic Service Agent for Linux and Windows is a no-charge software tool, which, when installed on your system, continuously monitors, collects, and periodically submits hardware problem information to IBM support. It also can collect hardware and software information, which helps IBM support diagnose problems.

IBM support representatives use system problem descriptions and service information to diagnose issues with your systems. With advance knowledge about potential problems, IBM can proactively assist you achieve higher availability and better performance of your systems.

Electronic Service Agent™, when configured:

- Places service calls to IBM automatically if the server is under a service agreement or warranty.
- Collects and securely sends scheduled system inventory and diagnostic inventory to an IBM database. This inventory information is available to IBM support representatives when they solve your problem.
- Provides problem-definable threshold levels for error reporting.
- Communicates with IBM by using a secure Internet connection through encryption and authentication.
- Sends email notifications when a serviceable problem is detected and service request is opened.

---

### What's new

IBM Electronic Service Agent for Linux and Windows Versions 7.1 to 7.1.5 provide the following new features, enhancements, and fixes:

#### What's new in IBM Electronic Service Agent Version 7.1.5

IBM Electronic Service Agent Version 7.1.5 for Linux and Windows provides this fix:

##### Fix

- Disabled SSLv3 support and enabled support to TLS 1.0, 1.1, and 1.2 versions.
- Few of the IP Addresses of the IBM Server configuration are changed. For more details, see **Networking** section in the Electronic Service Agent for Linux and Windows User's Guide.

#### What's new in IBM Electronic Service Agent Version 7.1.4

IBM Electronic Service Agent Version 7.1.4 for Linux and Windows provides this fix:

##### Fix

Activity log of Electronic Service Agent does not capture events for Integrated Management Module (IMMv2). For example, Electronic Service Agent does not

display activity logs for power failure events.

### What's new in IBM Electronic Service Agent Version 7.1.3

IBM Electronic Service Agent Version 7.1.3 for Linux and Windows provides the following fixes and enhancements:

#### Enhancements

- Support for First Failure Data Capture for CMM and IMMv2.
- Added information on the behavior of Electronic Service Agent when different SystemX hardware and various configurations are involved.

The following CLI commands are enhanced:

- activity
- esxiSettings
- immSettings
- mmSettings
- problem

#### Fixes

- When IBM Systems Director or System Software Monitor (SSM) is monitoring the system and Service Advisor is running, Electronic Service Agent collects Dynamic System Analysis (DSA) and sends to IBM. The call home should be deferred to IBM Systems Director or SSM.
- BladeCenter Management Module Interconnect Settings fields are missing in the graphical user interface of Electronic Service Agent.
- When you activate Electronic Service Agent without the IMM or the MM options, a message Activation operation completed successfully. Look in activity log for details as to whether the subscription worked is displayed. The message is made generic asking the users to check the activity log.
- When you click **Service Information** in graphical user interface, the Electronic Service Agent graphical user interface gives a 500 error and does not display the **Service Information** settings.
- DSA is collected and uploaded twice for a problem when Service Advisor is disabled. This happens when you enable Service Advisor in AMM or CMM and collect DSA, and disable Service Advisor.
- Electronic Service Agent is unable to create Service Request when a test problem is created on a virtual machine.
- When you disable inventory collection in Electronic Service Agent graphical user interface and try to collect inventory manually, a wrong message The selected collector(s) have been started, and will complete in approximately 2-15 minutes. Please check the activity log to view the results is displayed.

### What's new in IBM Electronic Service Agent Version 7.1.2

IBM Electronic Service Agent Version 7.1.2 for Linux and Windows provides the following fixes:

- When you run the **esacli updateSettings -e false** CLI command Electronic Service Agent throws an error.



- Activity log of Electronic Service Agent does not display log entries for DBCS characters. For example Electronic Service Agent does not display activity logs when the locale is Japanese.

### **What's new in IBM Electronic Service Agent Version 7.1.1**

IBM Electronic Service Agent Version 7.1.1 for Linux and Windows provides the following new features and enhancements:

- When Electronic Service Agent is running on a blade, Electronic Service Agent collects and transmits DSA data for serviceable errors even if it has deferred creation of problem ticket to Service Advisor on the AMM.
- When Electronic Service Agent is running on an xITE, Electronic Service Agent collects and transmits DSA data for serviceable errors even if it has deferred creation of problem ticket to Service Advisor on the CMM.
- When Electronic Service Agent is running on an a stand alone server with an Integrated Management Module (IMM) service processor, Electronic Service Agent can be configured to listen to events detected by the IMM instead of events detected by the OS.

### **What's new in IBM Electronic Service Agent Version 7.1**

IBM Electronic Service Agent Version 7.1 for Linux and Windows provides the following new features and enhancements:

- All Electronic Service Agent web graphical interface functions are available through the Electronic Service Agent command line interface.
- When IBM requests a customer to send a system heartbeat, Electronic Service Agent sends email to the IBM System Service Representative's email address that is defined by the customer.

The following CLI commands are added or enhanced:

- activate (enhanced)
- activity
- connectionSettings
- contactSettings
- esxiSettings
- ibmId
- immSettings
- interfaces
- locationSettings
- logSettings
- mmSettings
- notificationSettings
- opNotificationSettings
- opTestSettings
- problem
- problemSettings
- resume
- service
- serviceSettings
- start

- stop
- supportProxySettings
- suspend
- test (enhanced)
- updateSettings

---

## Chapter 2. Planning for Electronic Service Agent

Consider prerequisites, security, and the topology of the network you plan to support before you install Electronic Service Agent for Linux & Windows.

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### Prerequisites

Ensure that the prerequisites are met before you install Electronic Service Agent.

**Note:** Installing IBM Systems Director and Electronic Service Agent on the same server is not advised. If you are installing them on the same server, look for warning messages and resolve them.

### Supported operating systems

Electronic Service Agent can be installed on supported operating systems. Ensure that your system is running a supported operating system before you install.

#### Linux

Electronic Service Agent on Linux supports the following operating systems:

- SUSE Linux Enterprise Server (32 or 64 bit) Version 10 or 11 SP2
- Red Hat Enterprise Linux (32 or 64 bit) Version 5 or 6

#### Windows

Electronic Service Agent on Windows supports the following operating systems:

- Microsoft Windows Server 2012 Edition (64 bit)

**Note:** Microsoft Windows Server 2012 Edition (64 bit) is supported only when it is running on systems that include Integrated Management Module (IMM)

- Microsoft Windows Server 2008 Editions (32 or 64 bit)
- Microsoft Windows Server 2003 (32 bit)

**Note:** For Windows operating systems, except Microsoft Windows 2008 Server, you must have the *OSA IPMI Device Driver for Windows* installed. For download and installation information, see: <http://www.ibm.com/systems/support/supportsite.wss/docdisplay?brandind=5000008&lnocid=MIGR-5069608>

#### Hypervisor

Electronic Service Agent supports VMware ESX Server and ESXi Versions 3.5 to 5.1

**Note:** VMware is only supported when it is running on systems that include Integrated Management Module (IMM).

Electronic Service Agent supports KVM and Hyper-V

### Supported web browsers

The Electronic Service Agent interface can be accessed through a web browser.

Although other browsers or versions might work with the Electronic Service Agent graphical user interface, the following browser versions were tested for Electronic Service Agent 7.1.1.

- Firefox, versions 16 and 17
- Microsoft Internet Explorer, versions 8 and 9

**Note:** You might need to use compatibility mode on Microsoft Windows 2012 for a better view of the Electronic Service Agent web interface.

## Networking

IBM Electronic Service Agent can connect to IBM support through direct Internet (direct HTTPS connection) or proxy connection paths. IBM Electronic Service Agent uses these connection paths to send service information to IBM support. Ensure that your system has internet connectivity.

### Direct connection

IBM Electronic Service Agent can connect to IBM support through a direct internet connection.

### IBM Electronic Service Agent graphical user interface connections

The Electronic Service Agent graphical user interface connection can be made through an unsecure or a secure connection. The default ports Electronic Service Agent defines to launch the user interface are shown below. Make sure these port numbers (or others if you have changed them) have bi-directional communication open.

- **Unsecure:** `http://localhost:5023/esa`
- **Secure:** `https://hostname.domain.com:5024/esa`

### The CIM Listener connection

Electronic Service Agent establishes the CIM listener by using port 5990. Make sure that this port number has bidirectional communication open. For example, `http://ESA_Server_IP:5990/CIMListener/EsaConsumer`

### First Failure Data Capture

Electronic Service Agent collects First Failure Data Capture (FFDC) through CMM and IMMv2 by using port 9526. Make sure that this port number has bidirectional communication open.

### Proxy connection

IBM Electronic Service Agent can connect to IBM support through either the Service and Support proxy or a user supplied proxy. If you are using a proxy connection, ensure that the port number has bidirectional communication open and then restart the IBM Electronic Service Agent agent on the proxy system after you activate it through the IBM Electronic Service Agent activation wizard.

**Note:** A typical default port number for a proxy server is 5026.

## Connecting through a firewall

If you are connecting IBM Electronic Service Agent to IBM support through a firewall, configure the firewall to allow communication with IBM. Ensure that the following IP addresses and port numbers have bidirectional communication open.

**Note:** IP addresses might change, so ensure that you use DNS names whenever possible.

DNS name	IP address	Port
www6.software.ibm.com	170.225.15.41	443
www.ecurep.ibm.com	192.109.81.20	443
download4.boulder.ibm.com	170.225.15.107	80
download4.mul.ie.ibm.com	129.35.224.107	80
delivery04-bld.dhe.ibm.com	170.225.15.104	80
delivery04-bld.dhe.ibm.com	129.35.224.104	80
delivery04-mul.dhe.ibm.com	129.35.224.115	80
delivery04-mul.dhe.ibm.com	170.225.15.115	80
delivery04.dhe.ibm.com	129.35.224.105	80
delivery04.dhe.ibm.com	170.225.15.105	80
download3.boulder.ibm.com	170.225.15.76	80
download3.mul.ie.ibm.com	129.35.224.114	80
delivery03-bld.dhe.ibm.com	170.225.15.103	80
delivery03-bld.dhe.ibm.com	129.35.224.103	80
delivery03-mul.dhe.ibm.com	129.35.224.113	80
delivery03-mul.dhe.ibm.com	170.225.15.113	80
dsw.boulder.ibm.com	170.225.15.124	80
dsw.mul.ie.ibm.com	129.35.224.124	80
dsw-bld.dhe.ibm.com	170.225.15.108	80
dsw-bld.dhe.ibm.com	129.35.224.108	80
dsw-mul.dhe.ibm.com	129.35.224.109	80
dsw-mul.dhe.ibm.com	170.225.15.109	80
dsw.dhe.ibm.com	129.35.224.110	80
dsw.dhe.ibm.com	170.225.15.110	80
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	129.42.50.224	443
www-945.ibm.com	129.42.42.224	443
www.ibm.com	129.42.56.216	443
www.ibm.com	129.42.54.216	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

DNS name	IP address	Port
www.ibm.com	129.42.54.216	80
www.ibm.com	129.42.60.216	80
www-03.ibm.com	204.146.30.17	80

---

## Security

When you use Electronic Service Agent to connect to IBM support, ensure that you consider the privacy and the security of the information you transmit to IBM support, and user security.

See the following on the privacy and the security of information you transmit to IBM support, and the security of those using Electronic Service Agent.

### Information privacy

The service information you provide to IBM support will remain 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 IBM support is collected from the information you entered into Electronic Service Agent and the information 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 Electronic Service Agent includes the following:

- Your support contact information, including names, phone numbers, and e-mail addresses.
- Software listings

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

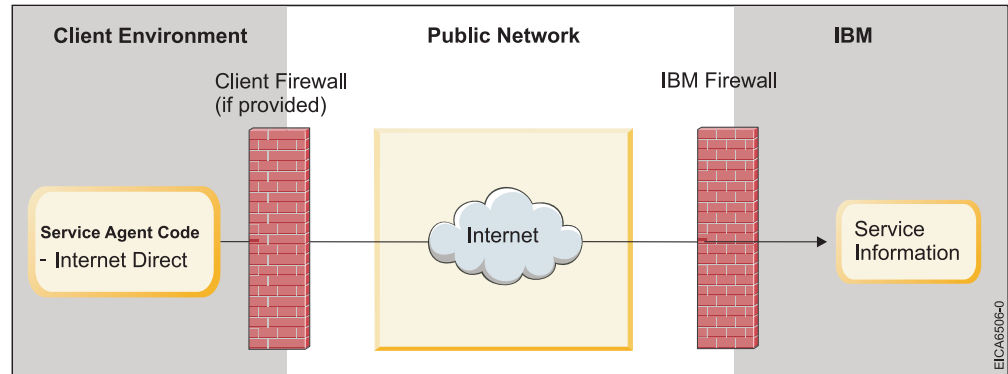
### Information transmission security

The problem information and service information you send to IBM support is safe and secure.

Electronic Service Agent collects problem and service information and sends it to IBM support on a scheduled basis. All Electronic Service Agent transactions are

outbound requests that are sent using the security of Hypertext Transfer Protocol Secure (HTTPS). Electronic Service Agent has no inbound capability. It cannot accept incoming connection attempts. Electronic Service Agent initiates a connection with IBM support and then IBM replies. IBM never initiates a connection to Electronic Service Agent. During the configuration and activation of Electronic Service Agent, you select to transmit this information by using a direct or proxy connection. Electronic Service Agent uses the connectivity environment of the client that includes any firewalls of the client.

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



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

## Transmission of service information

**Note:** The Internet Service Provider relationship and connection are the responsibility of the client.

If you select to use a direct connection to send your information, then the following process applies:

1. At the scheduled time, Electronic Service Agent collects the information to be transmitted and queues it for transmission.
2. Electronic Service Agent establishes a TLS Internet connection with IBM support.
3. The collected information is sent to IBM.
4. After the arrival to IBM, the information is transferred to the appropriate IBM secured database.

## User security

User and file security is provided by the user authorizations and privileges of the operating system on which Electronic Service Agent is installed. A user account with administrator authority on Windows, or root authority on Linux, must be used to log on to Electronic Service Agent.





---

## Chapter 3. IBM Electronic Service Agent behavior on different SystemX hardware and different configurations

IBM Electronic Service Agent for Linux and Windows behavior on various SystemX servers and when various configurations are involved.

- When IBM Electronic Service Agent is monitoring the system and detects a serviceable event, a problem report is created automatically and First Failure Data Collection (FFDC) and Dynamic System Analysis (DSA) logs are collected and sent to IBM.
- When Service Advisor is enabled on any of the management modules, and IBM Electronic Service Agent detects a serviceable event, IBM Electronic Service Agent collects FFDC and DSA logs, and sends the logs to IBM but does not create a problem ticket.
- When IBM Systems Director is managing the system, IBM Electronic Service Agent does not handle problem ticket collection or FFDC and DSA logs collection.



---

## Chapter 4. Installing Electronic Service Agent

Run the Electronic Service Agent installation package for your operating system to install Electronic Service Agent.

### Before you begin

If you are using VMware, complete the following tasks:

1. Install a supported version of Linux or Windows in one of the virtual servers that are running on VMware.
2. Install Electronic Service Agent on the virtual server.
3. Configure Electronic Service Agent to connect to the Integrated Management Module (IMM)

**Note:** Install and configure only one version of Electronic Service Agent on a virtual server to monitor the System x server.

### About this task

When you install Electronic Service Agent 7.1.5, it replaces any existing installation of Electronic Service Agent 7.1.4. It preserves all settings which include connectivity, system location, and system contact information. If the instance of version 7.1.4 is active when version 7.1.5 is installed, then the new instance is automatically activated. However, any problems that are displayed in the **Problem Information** panel of version 7.1.4 are removed when you install version 7.1.5.

**Attention:** You can download Electronic Service Agent from the Electronic Service Agent website: <https://www.ibm.com/support/electronic/portal>.

Only a user with administrator authority on Windows or root authority on Linux can install Electronic Service Agent.

**Note:** Installing IBM Systems Director and Electronic Service Agent on the same server is not advised. If you are installing them on the same server, look for warning messages and resolve them.

### Procedure

1. Extract the installation files from the compressed file.
2. Run the installation program for your operating system.

*Table 1. Electronic Service Agent installation programs*

Operating system	Installation program
Windows 32-bit	IBMXB-ESA-715-Win-Setup.exe
Windows 64-bit	IBMXB-ESA-715-Win-64bit-Setup.exe
Linux 32-bit	IBMXB-ESA-715-Linux-Setup.sh
Linux 64-bit	IBMXB-ESA-715-Linux-64bit-Setup.sh

---

## Installing Electronic Service Agent in silent mode

You can run the installation program in silent (unattended) mode.

### Procedure

1. Create a file with the name *installer.properties*.
2. Put it in the same directory as the installation program.
3. Add the following lines to the *installer.properties* file:

```
INSTALLER_UI=silent
$LICENSE_ACCEPTED=true
RESTART_DIRECTOR=true
```
4. Run the installation program for your operating system.

### What to do next

You can access the Electronic Service Agent graphical user interface after the installation. See “Accessing the Electronic Service Agent graphical user interface” on page 19

Before you use the software, activate Electronic Service Agent. See Chapter 5, “Activate Electronic Service Agent,” on page 15.

---

## Chapter 5. Activate Electronic Service Agent

Activation of Electronic Service Agent consists of the following activities:

- Specifying contact and location information so that IBM support knows the location of the system where Electronic Service Agent is running and whom to contact.
- Configuring the service connection so that Electronic Service Agent can send service information to IBM support.
- Configuring the operational settings of Electronic Service Agent. Default values for operational settings are used during activation. You can change the operational settings during configuration of Electronic Service Agent.
- Running an operational test to see whether the transmission of service information to IBM support is working correctly.
- Sending a test problem to IBM to verify correct operation.

---

### Configuring connectivity to the management module

Configure connectivity to the Integrated Management Module (IMM), the Advanced Management Module (AMM), or the Common Management Module (CMM) for best possible hardware problem detection.

#### About this task

If the server on which you installed Electronic Service Agent has the Integrated Management Module (IMM), v1 or v2, configure connectivity to this module. You can activate two scalable system nodes by using the **esacli activate** command.

If the server on which you installed Electronic Service Agent is a blade and has an Advanced Management Module (AMM) or a Common Management Module (CMM), configure connectivity to any of these modules.

Use one of the following methods to configure this connectivity:

- Activation wizard

For information, see “Activating by using activation wizard.”

**Note:** You can configure only IMM and AMM by using the activation wizard. For CMM and scalable systems with two IMMv2 nodes, use the **esacli activate** command.

- **esacli activate** command  
For information, see Using the esacli activate command.
- Management module settings panel

**Note:** Configure access to an IMM when you are on a virtual operating system.

---

### Activating by using activation wizard

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

## Procedure

1. Log in to the Electronic Service Agent graphical user interface.
2. Click **Start activation wizard**.
3. Enter the data in the fields on each panel of the wizard. See, “Electronic Service Agent functions and settings” on page 19
4. Click **Next** to proceed.
5. Click **Activate** when you reach the **Summary** panel.
6. Review the **Results** panel.
7. Click **Finish**.

---

## Activating by using `esacli activate` command

You can use the `esacli activate` command to set the configuration settings necessary to activate Electronic Service Agent on your system.

### Related reference:

“`esacli activate`” on page 27

Use the `esacli activate` command to set the configuration settings necessary to activate the Electronic Service Agent instance. You can also specify optional event source values for the activate command when you subscribe to a management module.

---

## Checking transmission of service information to IBM

Run an operational test to see whether the transmission of service information to IBM support is working correctly.

### Before you begin

Check whether the transmission of service information to IBM support is done by 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 check the transmission of information by running the `esacli test -o` command. See “`esacli test`” on page 67.

**Tip:** You can verify the event source connectivity using the `esacli test -i` for IMM definitions or `esacli test -m` for AMM or CMM definitions. See “`esacli test`” on page 67.

### About this task

To check the transmission of service information to IBM support, complete the following steps:

## Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
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 “Viewing the activity log” on page 74.

---

## Sending a test problem to IBM

To verify correct operation of Electronic Service Agent, send a test problem to IBM.

### About this task

You can send a test problem to IBM support by 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.

To send a test problem to IBM, complete the following steps:

1. Access and log on to the Electronic Service Agent.  
See "Accessing the Electronic Service Agent graphical user interface" on page 19.
2. Select **Problem information**.
3. Click **Send test problem**.  
A test problem with a status of **Detected** is generated.
4. Click **Refresh list of problems** until the problem shows a status of **Open**.
5. Select the test problem, select the **Display** action, and click **Go**.

**Tip:** You can also create a test problem by using the **esacli test -p** command.

To use esacli commands to send a test problem to IBM, complete the following steps:

1. Use the esacli test command to send a test problem to IBM.
2. Use the esacli problem command to list all problems.

Problem list:

```
13d6cbc0974-16eff2f0 Open
```

You can list problems using either the problem ID **13d6cbc0974-16eff2f0** or the service request number **USE0DSG9RMP**.

3. Use the esacli problem command to list the details about the test problem.

```
esacli problem --id 13d6cbc0974-16eff2f0
```

Problem information:

```
Service request:      USE0DSG9RMP
Status:              Open
Is test problem:     Yes
Problem description:  Test symptom generated by
                    Electronic Service Agent
Problem severity:    2
Problem occurrence date/time:  Tue Dec 13 08:38:27 CST 2011
Service request status:  Open
Problem sent:        Yes
Number of attempts:  1
Last changed:        Tue Dec 13 08:41:46 CST 2011
Error code:          ElectronicService.Test
```

For more information, see "esacli test" on page 67





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## Chapter 6. Using the Electronic Service Agent graphical user interface

The Electronic Service Agent graphical user interface provides standard graphical interface controls to access Electronic Service Agent functions.

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### Accessing the Electronic Service Agent graphical user interface

Use a web browser to access the Electronic Service Agent graphical user interface.

#### About this task

To access and use the Electronic Service Agent graphical user interface, complete the following tasks:

#### Procedure

1. Start a browser.
2. In the browser address field, enter one of the following addresses:

`http://localhost:5023/esa` (unsecure)  
`https://localhost:5024/esa` (secure)

**Note:** If you receive a warning about an untrusted site certificate when you access the secure connection, accept the certificate to proceed to the Electronic Service Agent graphical interface.

**Note:** You can also access the Electronic Service Agent graphical user interface from a remote web browser by using the IP address or host name of the ESA system. For example: `https://hostname.domain.com:5024/esa`

3. Log on a user account with administrator authority on Windows, or root authority on Linux.

---

### Electronic Service Agent functions and settings

The panels that are listed here assist you with various functions and settings of the Electronic Service Agent graphical user interface.

**Note:** You can click **Help** in the upper right corner of the Electronic Service Agent graphical user interface to view the information about various functions and settings.

- **Status**

Shows the status of the monitoring, collecting, and reporting services. It also shows identity of the system or partition on which Electronic Service Agent is running.

- **Problem information**

Use this panel to manage any problem that is detected.

- **Service information**

Use this panel to enable and set the type and frequency of information to collect.

- **Activity log**

Shows activity of Electronic Service Agent for a selected period.

- **Settings**
  - **Problem information**  
Use this panel to enable automatic hardware problem reporting. Set the frequency and the number of attempts to make when transmission of a problem to IBM support fails.
  - **Service information**  
Use this panel to enable and set the type and frequency of information to collect.
  - **Operational test**  
Use this panel to enable and specify the frequency of automatic testing of the connection to IBM.
  - **Update**  
Use this panel to schedule automatic downloads and installations of Electronic Service Agent updates. Your system will not be restarted when updates are automatically downloaded and installed.
  - **Notifications**  
Use this panel to enable sending email notifications and SNMP traps to the locations you specify.
  - **Management module**  
Use this panel to configure connectivity with the Integrated Management Module (IMM) and the Advanced Management Module (AMM) or the Common Management Module (CMM).  
  
**Note:** Configuring connectivity to the management modules enables Electronic Service Agent to perform the best possible hardware problem detection.
  - **Service contact**  
Use this panel to specify who IBM support can contact when Electronic Service Agent reports a problem .
  - **System location**  
Use this panel to specify the physical location of the system that Electronic Service Agent is monitoring.
  - **Service and support proxy**  
Use this panel to configure a system or partition as a connection point through which other systems or partitions can connect to IBM support.
  - **Connectivity**  
Use this panel to select the type of connection to use when Electronic Service Agent is connecting to IBM support.
  - **ESXi Settings**  
Use this panel to configure details of VMWare ESXi.
  - **Trace level**  
Use this panel to specify the message severity level to be recorded during Electronic Service Agent activity.
- **Export/Import**
  - **Import**  
Use this panel to import Electronic Service Agent configuration and use the same contact and location information and operational settings as previously defined on another system.
  - **Export**

Use this panel to export Electronic Service Agent configuration. You can use the same contact and location information and operational settings on another system. You can even save the configuration for later use on the same system.

- **IBM ID**

Use this panel to authorize users with IBM IDs to view service information that was sent to IBM support by Electronic Service Agent.

- **IBM Electronic Support**

Use this panel to display and manage service requests to IBM support.



---

## Chapter 7. Electronic Service Agent commands

The **esacli** commands help you with various operations on a running Electronic Service Agent instance.

### Accessing the **esacli** command

The **esacli** command can be accessed in the Electronic Service Agent directory path. To run **esacli** commands, either navigate to the path or include the path in your system's environment variable path.

On Windows, the default location of the **esacli** command:

```
c:\Program Files\IBM\ElectronicServiceAgent\bin
```

On Linux, the default location of the **esacli** command:

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

### **esacli** commands

The following **esacli** commands are available:

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

#### **esacli activate**

Use the **esacli activate** command to set the configuration settings necessary to activate the Electronic Service Agent instance. You can also specify optional event source values for the activate command when you subscribe to a management module.

#### **esacli activity**

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

#### **esacli connectionSettings**

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

#### **esacli contactSettings**

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

#### **esacli esxiSettings**

Use the **esacli esxiSettings** commands to configure and view the settings relative to running Electronic Service Agent in a VMWare ESXi partition.

#### **esacli export**

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

#### **esacli help**

Use the **esacli help** command to receive information about the various **esacli** functions.

#### **esacli ibmId**

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

**esacli immSettings**

Use the **esacli immSettings** to set and display information for a single or a scalable Integrated Management Module (IMM).

**esacli import**

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

**esacli interfaces**

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

**esacli locationSettings**

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

**esacli logSettings**

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

**esacli mmSettings**

Use the **esacli mmSettings** to set and display information for Common Management Modules (CMM) or Advanced Management Modules (AMM).

**esacli notificationSettings**

Use the **esacli notificationSettings** to set and display information that indicates where Electronic Service Agent sends notifications when errors occur.

**esacli opNotificationSettings**

Use the **esacli opNotificationSettings** to set and display information indicating where Electronic Service Agent sends notifications when operational tests are performed.

**esacli opTestSettings**

Use the **esacli opTestSettings** to set and display information indicating when Electronic Service Agent attempts to perform an automatic operational test.

**esacli problem**

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

**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.

**esacli resume**

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

**esacli service**

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

**esacli serviceSettings**

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

**esacli start**

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

**esacli status**

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

**esacli stop**

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

**esacli supportProxySettings**

Use the **esacli supportProxySettings** command to set and display information for configuration of the Service and Support Proxy.

**esacli suspend**

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

**esacli test**

Use the **esacli test** command to perform different types of test operations for the Electronic Service Agent instance.

**esacli updateSettings**

Use the **esacli updateSettings** command to set and display information about how often the Electronic Service Agent checks for program updates.

---

## How to read syntax diagrams

Review the conventions that are 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 by 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 you are running 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 action is to be taken.

**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 that are 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.

---

## esacli

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

### Synopsis

```
esacli subcommand subcommand-options
```

### Description

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

### Operands

#### subcommand

Specifies the specific subcommand to be run.

### Options

#### subcommand-options

Specifies the options that are specific to the subcommand to be run. See the specific subcommand documentation for the options specific to the command.

### Examples

#### 1. No command specified

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

#### **esacli**

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

Subcommands:

<code>activate</code>	Activate the agent.
<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>esxiSettings</code>	Sets a configuration for the VMWare ESXi manager used for diagnostics.
<code>export</code>	Export configuration settings.
<code>help</code>	Provides command help.
<code>ibmId</code>	Sets IBM ids associated with this ESA system.
<code>immSettings</code>	Sets and lists management modules settings for IMM.
<code>import</code>	Import configuration settings.
<code>interfaces</code>	Lists the network interface cards.



locationSettings	Configures and displays system location information.
logSettings	Sets and lists logging level.
mmSettings	Sets and lists management modules settings for CMM and AMM.
notificationSettings	Configures notification settings.
opNotificationSettings	Sets an IBM email address for operation testing.
opTestSettings	Configures operational test 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.
updateSettings	Configures time when ESA updates are checked for and applied.

Use "esacli help <subcommand>" to obtain the command syntax for a specific subcommand.

---

## esacli activate

Use the **esacli activate** command to set the configuration settings necessary to activate the Electronic Service Agent instance. You can also specify optional event source values for the activate command when you subscribe to a management module.

### Synopsis

The parameter validation matches the validation by the Electronic Service Agent web interface.

```
esacli activate {-o organization} {-n name} {-e email} {-p phone} {-w name}
{-x email} {-y phone} {-c country} {-q phone} {-d country} {-a address} {-m city}
{-s state} {-z postal_code} {-b building} [-f imm-host] [-g user-name]
[-h password] [-j imm-host] [-k user-name] [-r password] [-t host-address]
[-u user-name] [-v password] [-i IBMID]
```

### Description

Use the **esacli activate** command to set the configuration settings necessary to activate the Electronic Service Agent instance. If the Electronic Service Agent instance was activated previously, then this command updates the configuration settings to the values provided.

### Options

**-o** | **--organization** {*organization*}

Specifies the name of the organization that owns or is responsible for the system.

- n | **--contact.name** {*name*}  
Specifies the name of the primary person in the organization responsible for the system.
- e | **--contact.email** {*email*}  
Specifies the email address for the primary contact person.
- p | **--contact.phone** {*phone*}  
Specifies the telephone number where the primary contact person can be reached. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the contact country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified).
- w | **--sec.contact.name** {*name*}  
Specifies the name of the secondary person in the organization responsible for the system.
- x | **--sec.contact.email** {*email*}  
Specifies the email address for the secondary contact person.
- y | **--sec.contact.phone** {*phone*}  
Specifies the telephone number where the primary contact person can be reached. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the contact country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified).
- c | **--contact.country** {*country*}  
Specifies the name of the country or region for the contact person. The country must be specified as a valid two letter code as defined by ISO-3166.
- q | **--location.phone** {*phone*}  
Specifies the telephone number where the primary contact person can be reached. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the contact country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified).
- a | **--location.address** {*address*}  
Specifies the address where the system is located.
- m | **--location.city** {*city*}  
Specifies the name of the city where the system is located.
- 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.
- d | **--location.country** {*country or region*}  
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.
- z | **--location.postal** {*postal\_code*}  
Specifies the postal code where the system is located.
- b | **--location.building** {*building*}  
Specifies the building, floor, and office where the system is located.

- f** | **--imm.address** *{host-address}*  
Specifies the IP address or host name of the Integrated Management Module (IMM). Required if -g or -h is specified.
- g** | **--imm.user** *{user-name}*  
Specifies the user name for accessing the IMM. Required if -f or -h is specified.
- h** | **--imm.password** *{password}*  
Specifies the password for accessing the IMM. You are prompted to enter this password (with echo turned off) if either if -f or -g is specified.
- j** | **--imm2.address** *{host-address}*  
Specifies the IP address or host name of a second Integrated Management Module (IMM). Required if -k or -r is specified. This parameter is only allowed if -f is specified.
- k** | **--imm2.user** *{user-name}*  
Specifies the user name for accessing the second IMM. Required if -j or -r is specified.
- r** | **--imm2.password** *{password}*  
Specifies the password for accessing the second IMM. You are prompted to enter this password (with echo turned off) if either -j or -k is specified.
- t** | **--mm.address** *{host-address}*  
Specifies the IP address or host name of the blade management module (AMM or CMM). Required if -u or -v is specified.
- u** | **--mm.user** *{user-name}*  
Specifies the user name for accessing the blade management module (AMM or CMM). Required if -t or -v is specified.
- v** | **--mm.password** *{password}*  
Specifies the password for accessing the blade management module (AMM or CMM). You are prompted to enter this password (with echo turned off) if either if -t or -u is specified.
- i** | **--ibmid** *{IBMid}*  
Specifies the IBM ID to be associated with the system.

## Exit status

The following table contains the codes 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}
- **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}.
- **27**: An invalid IBM ID was specified. IBM ID: {id}
- **28**: Activation failed. Reason: {Reason}
- **42**: Invalid value {value} specified for the {option} option.

## Examples

### 1. Successful activate

This example illustrates running the **esacli activate** command successfully.

```
--esacli activate --organization IBM
--contact.name "Joe Primary"
--contact.email "jprimary@ibm.com"
--contact.phone "8455551234"
--contact.country US
--sec.contact.name "Jane Backup"
--sec.contact.email "jbackup@us.ibm.com"
--sec.contact.phone "8455551235"
--location.phone "8455551236"
--location.address "2455 S. Rd"
--location.city Poughkeepsie
--location.state NY
--location.country US
--location.postal "12601"
--location.building 707
```

---

## esacli activity

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

### Synopsis

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

### Description

Use the **esacli activity** command to display activity log entries for the 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 time is expressed using a 24 clock. The date and time (optional) must be specified using one of the following formats:

- YYYY-MM-DD HH:MM. For example, 2013-09-06 10:10.
- EEEE, MMMM d, yyyy h:mm:ss a z. For example, Thursday, July 27, 2006 10:10:02 PM PST.
- MMMM d, yyyy h:mm:ss a z. For example, July 27, 2006 10:10:02 PM PST.
- MMM d, yyyy h:mm:ss a. For example, Sep 27, 2006 10:10:02 PM.
- M/d/yy h:mm a . For example, 9/30/1998 04:06 PM.
- M/d/yy h:mm:ss a. For example, 9/30/1998 04:06:06 PM.

**-e** | **--end date-timestamp**

Specifies a date and time for the earliest entry from the activity log to be returned. The time is expressed using a 24 clock. The date and time (optional) must be specified using one of the following formats:

- YYYY-MM-DD HH:MM. For example, 2013-09-06 10:10.

- EEEE, MMMM d, yyyy h:mm:ss a z. For example, Thursday, July 27, 2006 10:10:02 PM PST.
- MMMM d, yyyy h:mm:ss a z. For example, July 27, 2006 10:10:02 PM PST.
- MMM d, yyyy h:mm:ss a. For example, Sep 27, 2006 10:10:02 PM.
- M/d/yy h:mm a . For example, 9/30/1998 04:06 PM.
- M/d/yy h:mm:ss a. For example, 9/30/1998 04:06:06 PM.

## 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}
- **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 the **esacli activity** command 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 in a locale format

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

```
esacli activity -b "7/21/12 9:15 AM" -e "7/24/12 3:15 PM"
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 in a standard format

This example illustrates running the **esacli activity** command to list the activity between two dates in 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.
```

---

## 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 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 the setting values are to be displayed.

The optional script option generates this command that contains 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
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli connectionSettings -d script > connections.bat.**

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 prompts 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 by 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 by 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

- Adds a direct connection to IBM

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

```
esacli connectionSettings -t direct
```

- Adds a proxy connection to IBM

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

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

- Replaces 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 -t proxy  
-h proxy.ibm.com -p 5026 -u user1 -w password -r 1
```

- Removes the first connection to IBM

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

```
esacli connectionSettings -k 1
```

---

## 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 that is associated with the service contact information. All required fields must be entered to run this command. All optional fields that are not specified, are cleared. 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 the setting values are to be displayed.



The optional `script` option generates this command that contains 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
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli contactSettings -d script > contacts.bat.**

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 must be a valid two 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 number where the organization is located. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the location country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified).
- g | **--organization.altfax** *phone*  
Specifies the facsimile number where the organization is located. A valid phone number must include at least 5 but not more than 30 characters. A valid phone

number if the location country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified).

- q** | **--organization.help** *phone*  
Specifies the facsimile number where the organization is located. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the location country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified).
- 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 facsimile number where the organization is located. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the location country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified). This setting cannot be cleared.
- i** | **--contact.altphone** *phone*  
Specifies the facsimile number where the organization is located. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the location country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified).
- 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. Can contain a PIN number. 45 characters max.
- 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 facsimile number where the organization is located. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the location country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified). This setting cannot be cleared.
- r** | **--sec.contact.altphone** *phone*  
Specifies the facsimile number where the organization is located. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the location country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified).

- 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"
```

---

## esacli esxiSettings

Use the **esacli esxiSettings** commands to configure and view the settings relative to running Electronic Service Agent in a VMWare ESXi partition.

### Synopsis

```
esacli esxiSettings [-d [script]]
```

```
esacli esxiSettings {-e false}
```

```
esacli esxiSettings [-e true] {-h hostname} {-u userid} {-p password}
```

### Description

The **esacli esxiSettings** command configures and displays the settings relative to running IBM Electronic Service Agent in a VMWare ESXi partition. 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 the setting values are to be displayed.

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

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

```
esacli esxiSettings -d
```

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

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

```
esacli esxiSettings -d script > esxi.script
```

**Note:** For Windows systems, create a batch file in the following format:

```
esacli esxiSettings -d script > esxi.bat.
```

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

#### **-e** | **--enable** *true or false*

Specifies whether IBM Electronic Service Agent must connect to the VMWare ESXi embedded hypervisor.

#### **-h** | **--hostname** *hostname*

Specifies TCP/IP host name of the VMWare ESXi embedded hypervisor.

- u** | **--userid** *userid*  
Specifies the use ID needed to access the VMWare ESXi embedded hypervisor.
- p** | **--password** *password*  
Specifies the password that is needed to access the VMWare ESXi embedded hypervisor. This command prompts for password if the option is specified but a value is not 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}
- **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}
- **42**: Invalid value {value} specified for the {option} option.

## Examples

- Display the VMWare ESXi settings

This example shows how to use **esacli esxiSettings** to display the VMWare ESXi settings.

```
esacli esxiSettings -d
VMWare ESXi Settings
Enabled:           true
Hostname:         hostname
Userid:           user
Password:         *****
```

- Set the VMWare ESXi settings

This example shows how to use **esacli esxiSettings** to set the VMWare ESXi settings.

```
esacli esxiSettings -e true -h "hostname" -u "userid" -p "password"
```

---

## esacli export

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

### Synopsis

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

### Description

The **esacli export** command allows you to write the configuration settings for the Electronic Service Agent instance to a file. This command backs up the configuration settings, which can be used to restore an Electronic Service Agent configuration or clone a new system.

### 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 may replace an existing file.

## Exit status

The following table contains the codes 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**: The output file could not be created. Reason: {Reason}

## Examples

### 1. Successful export

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

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

---

## esacli help

Use the **esacli help** command to receive information about the various **esacli** functions.

## Synopsis

```
esacli help <subcommand>
```

## Description

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

## Operands

### subcommand

Specifies the specific subcommand for which help is requested.

## Options

None.

## Exit status

The following table contains the codes returned by this command.

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

## Examples

### 1. No command specified

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

**esacli help**

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

Subcommands:

<code>activate</code>	Activate the agent.
<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>esxiSettings</code>	Sets a configuration for the VMWare ESXi manager used for diagnostics.
<code>export</code>	Export configuration settings.
<code>help</code>	Provides command help.
<code>ibmId</code>	Sets IBM ids associated with this ESA system.
<code>immSettings</code>	Sets and lists management modules settings for IMM.
<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>mmSettings</code>	Sets and lists management modules settings for CMM and AMM.
<code>notificationSettings</code>	Configures notification settings.
<code>opNotificationSettings</code>	Sets an IBM email address for operation testing.
<code>opTestSettings</code>	Configures operational test 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 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.
<code>updateSettings</code>	Configures time when ESA updates are checked for and applied.

**Tip:** To display the command syntax for a specific subcommand, enter the following command:

```
esacli help subcommand
```

where *subcommand* is the name of the command for which you want help.

## 2. Provide command help

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

**esacli help [subcommand]**

Usage: `esacli help [subcommand]`

Subcommands:

activate	Activate the agent.
activity	Show activity log entries.
connectionSettings	Configures connectivity to IBM through proxy servers.
contactSettings	Sets and lists contact information for the monitored system.
esxiSettings	Sets a configuration for the VMWare ESXi manager used for diagnostics.
export	Export configuration settings.
help	Provides command help.
ibmId	Sets IBM ids associated with this ESA system.
immSettings	Sets and lists management modules settings for IMM.
import	Import configuration settings.
interfaces	Lists the network interface cards.
locationSettings	Configures and displays system location information.
logSettings	Sets and lists logging level.
mmSettings	Sets and lists management modules settings for CMM and AMM.
notificationSettings	Configures notification settings.
opNotificationSettings	Sets an IBM email address for operation testing.
opTestSettings	Configures operational test 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.
updateSettings	Configures time when ESA updates are checked for and applied.

---

## 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}

## Examples

- 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.

---

## esacli immSettings

Use the **esacli immSettings** to set and display information for a single or a scalable Integrated Management Module (IMM).

### Synopsis

```
esacli immSettings [[-d [script]]
```

```
esacli immSettings {-e false}
```

```
esacli immSettings [-e true] {-h hostname}
```

```
{-u username} {-p [password]}
```

```
{{-w hostname} {-x username}}
```

```
{-y [password]}
```

### Description

The **esacli immSettings** command sets and displays information for the Integrated Management Modules. This command indicates successful completion with the following message: IMM setting details request is added. Please check the activity log for status of request completion. 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 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 immSettings values, follow these steps:

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

```
esacli immSettings -d
```

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

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

```
esacli immSettings -d script > imm.script
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli immSettings -d script > imm.bat.**

3. Edit the imm.script file to specify the desired values.
4. Change the imm.script file to an executable script file.
5. Run the imm.script file to set the immSettings values on this or other systems.

**-e** | **--enable true or false**

Specifies whether ESA connects to the IMM. The default is true.

**-h** | **--hostname** *hostname*

Specifies the TCP/IP hostname of the IMM.

**-u** | **--userid** *username*

Specifies the user name to logon to the IMM.

**-p** | **--password** *password*

Specifies the password to logon to the IMM. The command prompts for the password if the option but not the value is provided.

**-w** | **--hostname2** *hostname*

Specifies the TCP/IP hostname of the second IMM.

**-x** | **--username2** *username*

Specifies the user name to logon to the second IMM.

**-y** | **--password2** *password*

Specifies the password to logon to the second IMM. The command prompts 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}
- **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}
- **42:** Invalid value {value} specified for the {option} option.

## Examples

- Display the IMM settings

```
esacli immSettings -d
```

```
Integrated Management Module Interconnect Settings
```

```
Enabled: true
```

```
Hostname: hostname
```

```
Userid: user
```

```
Password: *****  
Hostname 2: hostname  
Userid 2: user  
Password 2: *****
```

- Set the IMM settings  
`esacli immSettings -e true -h "hostname" -u "userid" -p "password"`
- Configure two IMMIs  
`esacli immSettings -e true -h "hostname" -u "userid" -p "password"  
-w "hostname2" -x "userid2" -y "password2"`

---

## esacli import

Use the **esacli import** command to import the configuration settings for the 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 Electronic Service Agent instance is activated as if the **esacli activate** command had been used.

### Synopsis

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

### Description

The **esacli import** command allows you to import the configuration settings for the 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 that 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 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**: The input file could not be read. Reason: {Reason}

### Examples

#### 1. Successful import

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

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

---

## 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 to input for the **esacli supportProxySettings** command.

### Options

None.

### 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.

### Examples

- Lists interface

The example illustrates displaying the network interfaces.

```
esacli interfaces
# Interface IP Address
1 eth0      127.0.0.1
2 eth1      127.0.0.2
```

---

## 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 are cleared. 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 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
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli locationSettings -d script > locations.bat.**

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. A valid phone number must include at least 5 but not more than 30 characters. A valid phone number if the location country is set to the United States or Canada must contain at least 10 but not more than 30 alpha numeric characters (any dashes, spaces, or parenthesis will automatically be removed if specified)

## 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"
```

---

## 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 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 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
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli logSettings -d script > log.bat.**

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 | Info | Debug | Trace > | < 0-5 >**  
Specifies the ESA logging level.

**Tip:** The following numbers are equivalent to the stated levels and are acceptable values for logging level.

- 0 - Trace
- 1 - Debug
- 2 - Information
- 3 - Warning
- 4 - Error
- 5 - Severe

## 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
```
- Sets logging level to Error using number  

```
esacli logSettings -l 4
```

---

## esacli mmSettings

Use the **esacli mmSettings** to set and display information for Common Management Modules (CMM) or Advanced Management Modules (AMM).

## Synopsis

```
esacli mmSettings [[-d [script]]]
```

```
esacli mmSettings {-e false}
```

```
esacli mmSettings [-e true] {-h hostname} {-u username} {-p [password]}
```

## Description

The **esacli mmSettings** command sets and displays information for Common Management Modules and Advanced Management Modules. This command indicates successful completion with the following message: MM setting details request is added. 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 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 mmSettings values, follow these steps:

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

```
esacli mmSettings -d
```

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

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

```
esacli mmSettings -d script > mm.script
```

**Note:** For Windows systems, create a batch file in the following format:

**esacli mmSettings -d script > mm.bat.**

3. Edit the mm.script file to specify the desired values.
4. Change the mm.script file to an executable script file.
5. Run the mm.script file to set the mmSettings values on this or other systems.

**-e | --enable true or false**

Specifies whether ESA connects to the IMM. The default is true.

**-h | --hostname hostname**

Specifies the TCP/IP hostname of the IMM.

**-u | --userid username**

Specifies the user name to logon to the IMM.

**-p | --password password**

Specifies the password to logon to the IMM. The command prompts for the password if the option is specified but not the value is not 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}
- **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}
- **42:** Invalid value {value} specified for the {option} option.

## Examples

- Display the AMM/CMM settings

```
esacli mmSettings -d
Management Module Interconnect Settings
    Enabled: true
    Hostname: hostname
    Userid: user
    Password: *****
```

- Set the AMM/CMM settings

```
esacli mmSettings -e true -h "hostname" -u "userid" -p "password"
>esacli mmSettings -e true --hostname "hostname" --userid
"userid" --password "password"
```

---

## esacli notificationSettings

Use the **esacli notificationSettings** to set and display information that indicates where Electronic Service Agent sends notifications when errors occur.

### Synopsis

```
esacli notificationSettings [[-d [script]]]
```

```
esacli notificationSettings {-t email|SNMP} [-d [script]]
```

```
esacli notificationSettings {-e false}
```

```
esacli notificationSettings {-t email} [-e true] {-h hostname} {-p port} [-u userid] [-w password]
```

```
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 that indicates where Electronic Service Agent sends notifications when errors occur. 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 the setting values are to be displayed.

The optional script option generates this command that contains 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
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli notificationSettings -d script > notifications.bat.**

3. Edit the notifications.script file to specify the wanted values.

**Tip: notificationSettings** contains two commands, one for email settings and one for snmp settings. Split the script file into two, one for each command and run them individually as required.

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 host name or an SNMP network manager host. A host name or IP address can be used.
- p** | **--port** *integer between 1 and 65535*  
Specifies an SMTP or an SNMP 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.
- l** | **--list** *email list*  
Specifies a comma-separated list of email addresses where notifications are sent. This list replaces any existing emails.
- c** | **--community** *SNMP Community*  
Specifies an SNMP Community where SNMP traps are sent.
- a** | **--add** *email address(es)*  
Specifies extra comma-separated email addresses where emails are sent. This option is mutually exclusive of other options.
- r** | **--delete** *email address(es)*  
Specifies comma-separated email addresses 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:** Cannot 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"
```

---

## 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** 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 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 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 following command: `esacli help opTestSettings`.

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 wanted 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 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 Electronic Service Agent instance.

### Synopsis

```
esacli problem [-i id [-d | -u]]
```

### Description

The **esacli problem** command allows 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

- i | --id {id}**  
Specifies the problem ID or service request ID of the problem for which information is to be displayed or deleted.
- d | --delete**  
Specifies that the problem is to be 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 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

#### 1. List problems

This example illustrates running the **esacli problem** command to list the problem summary.

```
esacli problem  
Problem list:  
  
Problem 138e4ca2c85-4aa3e003:  
Status: Detected  
Service request: USE0DSHHGRB  
Problem 137a5f4394d-1dd25937:  
Status: Open  
Service request: USE0DSHHZSH
```

## 2. Display problem details

This example illustrates running the **esacli problem** command to display details for a problem.

```
esacli problem -i 138bf87c4ab-56db477f
```

Problem information:

```
Problem ID:      138bf87c4ab-56db477f
Service request: USE0FSTNMDD
Status:         Open
Is test problem: Yes
Problem description: Test symptom generated by Electronic Service Agent
Problem severity: 2
Problem occurrence date/time: Wed Jul 25 14:05:42 CDT 2012
Service request status: Open
Problem sent:    Yes
Number of attempts: 1
Last changed:   Wed Jul 25 14:09:37 CDT 2012
Error code:     ElectronicService.Test
```

## 3. 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 12a0068d6d9-28094f01 deleted successfully.

---

## 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.

### Synopsis

```
esacli problemSettings [[-d [script]]
```

```
esacli problemSettings {-r false}
```

```
esacli problemSettings {-r true} {-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. 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 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
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli problemSettings -d script > problems.bat.**

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
```

---

## esacli resume

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

### Synopsis

```
esacli resume
```

## Description

The **esacli resume** command enables you to resume monitoring of the system by Electronic Service Agent .

## Options

None.

## 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}

## Examples

- Resuming Electronic Service Agent

This example illustrates running **esacli resume** to resume Electronic Service Agent .

```
esacli resume  
The system is being monitored.
```

---

## esacli service

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

## Synopsis

```
esacli service [-d]
```

```
esacli service {-t type} {-c}
```

## Description

The **esacli service** command sends hardware or software 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 that the setting values are to be displayed.

**-t** | **--type** *type of service information*

Specifies the type of service information that is collected. Options are hardware, and software. The types are case insensitive.

**-c** | **--collect**

Triggers an inventory collection.

## 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}.

## Examples

- 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.

---

## esacli serviceSettings

Use the **esacli serviceSettings** command to set and display information about the types of inventory 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 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.

### Operands

None.

### 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<hw|sw>.script
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli serviceSettings -d script > services<hw|sw>.bat**

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.
- 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 and software. The types are case insensitive.
- 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 is 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
```

---

## 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.

### Options

None.

### 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.

### Examples

- Starting the Electronic Service Agent.

This example illustrates running **esacli start** to start the Electronic Service Agent.

```
esacli start
```

```
The system is being monitored.
```

---

## esacli status

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

### Synopsis

```
esacli status
```

### Description

The **esacli status** command allows you to display the status of the Electronic Service Agent instance.

## Options

None.

## Exit status

The following table contains the codes 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}
- **29**: IBM Electronic Service Agent instance has not been activated.
- **30**: IBM Electronic Service Agent instance is currently suspended.

## Examples

### 1. Status after activation

This example illustrates running the **esacli status** command successfully.

```
esacli status
```

```
The system is being monitored.
```

```
System properties:
```

```
Name:          rtpssm
Type:          8737
Model:         AC1
Serial Number: 23FFP44
Manufacturer:  IBM
Partition ID:  1
Operating System: linux
Entity ID:     EPS/BOUB13097532
Product Version: 7.1.0.0 stdx71.gwsa130315
```

---

## 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.

## Options

None.

## 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.

## Examples

- Stopping Electronic Service Agent

This example illustrates running **esacli stop** to stop Electronic Service Agent.

```
esacli stop
IBM Electronic Service Agent was stopped.
```

---

## esacli supportProxySettings

Use the **esacli supportProxySettings** command to set and display information for configuration of 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 for configuration of the Service and Support Proxy. 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 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
```

**Note:** For Windows systems, create a batch file in the following format:  
**esacli proxySettings -d script > proxy.bat.**

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 one or more network interface to use. May be a comma separated string of names and / or numbers. 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 prompts for the password if the option is specified but the value is not 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 interface
Server port:              5026
Require HTTP basic authentication: true
User name:                user11
Password:                 *****
The status of the service and support proxy is: running
```

- Sets service and support proxy settings using any interface

```
esacli supportProxySettings set -e true -p 5026
```

```
esacli supportProxySettings set -e true -p 5026 -u user1 -w password
```

- Sets service and support proxy settings with an interface name

```
esacli supportProxySettings set -e true -i "eth0" -p 5026 -u user1 -w password
```

- Sets service and support proxy settings using a list of numbers

```
esacli supportProxySettings set -e true -i "1,2" -p 5026 -u user1 -w password
```

These numbers were determined by running the **esacli interfaces** command.

---

## esacli suspend

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

### Synopsis

```
esacli suspend
```



## Description

The **esacli suspend** command enables you to suspend monitoring of the system by IBM Electronic Service Agent.

## Options

None.

## 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.

## Examples

- 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.

---

## esacli test

Use the **esacli test** command to perform different types of test operations for the Electronic Service Agent instance.

## Synopsis

```
esacli test {-c | -o | -p | -n | -i | -m}
```

## Description

The **esacli test** command allows you to perform different types of test operations for the 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.

**-i | --imm**

Specifies that an Integrated Management Module (IMM) connectivity test is to be performed.

**-m | --mm**

Specifies that a blade management module (AMM or CMM) connectivity test is to be performed.

## Exit status

The following table contains the codes returned by this command.

- **0**: The operation completed successfully.
- **1**: IBM Electronic Service Agent instance is not running.
- **14**: A required option was not provided. Option: {option}
- **18**: An option was set more than once. Option: {option}
- **29**: IBM Electronic Service Agent instance has not been activated.
- **33**: Connectivity test failed.
- **34**: Notification test failed. Reason: {Reason}
- **35**: Operational test failed. Reason: {Reason}
- **36**: Test problem creation failed.
- **45**: Mutually exclusive arguments used together.

## Examples

### 1. 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 Fix_Repository_1 download2.boulder.ibm.com 170.225.15.28 80
success Fix_Repository_2 download4.boulder.ibm.com 170.225.15.107 80
success Fix_Repository_3 download4.mul.ie.ibm.com 129.35.224.107 80
success Fix_Repository_4 delivery04-bld.dhe.ibm.com 170.225.15.104 80
success Fix_Repository_5 delivery04-bld.dhe.ibm.com 129.35.224.104 80
success Fix_Repository_6 delivery04-mul.dhe.ibm.com 129.35.224.115 80
success Fix_Repository_7 delivery04-mul.dhe.ibm.com 170.225.15.115 80
success Fix_Repository_8 delivery04.dhe.ibm.com 129.35.224.105 80
success Fix_Repository_9 delivery04.dhe.ibm.com 170.225.15.105 80
success Fix_Repository_10 download3.boulder.ibm.com 170.225.15.76 80
success Fix_Repository_11 download3.mul.ie.ibm.com 129.35.224.114 80
success Fix_Repository_12 delivery03-bld.dhe.ibm.com 170.225.15.103 80
success Fix_Repository_13 delivery03-bld.dhe.ibm.com 129.35.224.103 80
success Fix_Repository_14 delivery03-mul.dhe.ibm.com 129.35.224.113 80
success Fix_Repository_15 delivery03-mul.dhe.ibm.com 170.225.15.113 80
success Fix_Repository_16 dsw.boulder.ibm.com 170.225.15.124 80
success Fix_Repository_17 dsw.mul.ie.ibm.com 129.35.224.124 80
success Fix_Repository_18 dsw-bld.dhe.ibm.com 170.225.15.108 80
success Fix_Repository_19 dsw-bld.dhe.ibm.com 129.35.224.108 80
success Fix_Repository_20 dsw-mul.dhe.ibm.com 129.35.224.109 80
success Fix_Repository_21 dsw-mul.dhe.ibm.com 170.225.15.109 80
success Fix_Repository_22 dsw.dhe.ibm.com 129.35.224.110 80
success Fix_Repository_23 dsw.dhe.ibm.com 170.225.15.110 80
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
38 successes
0 failures
Connectivity Verification Test Results: succeeded
```

### 2. 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.

### 3. Notification test

This example illustrates running the **esacli test** command to create a test notification.

```
esacli test -n
```

Test notification sent successfully.

### 4. Create test problem

This example illustrates running the **esacli test** command to create a test problem.

```
esacli test -p
```

Test problem created successfully.

### 5. IMM connectivity test

This example illustrates running the **esacli test** command to test connectivity to an IMM.

```
esacli test -i
```

Connectivity test ran successfully.

### 6. Blade Management Module connectivity test

This example illustrates running the **esacli test** command to test connectivity to a blade management module.

```
esacli test -m
```

Connectivity test ran successfully.

---

## esacli updateSettings

Use the **esacli updateSettings** command to set and display information about how often the Electronic Service Agent checks for program updates.

### Synopsis

```
esacli updateSettings [-d [script]]
```

```
esacli updateSettings {-e enable false}
```

```
esacli updateSettings [-d [script]] [-e enable true] {-x time} {-i interval}
```

### Description

The **esacli updateSettings** command sets and displays information about how often Electronic Service Agent checks for Electronic Service Agent program updates. 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 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 updateSettings values, follow these steps:

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

```
esacli updateSettings -d
```

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

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

```
esacli updateSettings -d script > updates.script
```

**Note:** For Windows systems, create a batch file in the following format:

**esacli updateSettings -d script > updates.bat.**

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

**-e** | **--enable true or false**

Specifies whether automatic ESA updates are enabled. The default is true.

**-i** | **--interval {integer between 1 and 60}**

Specifies number of days between ESA update checks.

**-x** | **--time update 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 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}
- **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 ESA update settings

This example shows how to display the update settings.

```
esacli updateSettings -d
Automatic Download and Install
  Enabled: true
  Schedule time: 11:15
  Interval in days: 6
```

- Set ESA update settings

```
esacli updateSettings -e true -x 13:10 -i 30
```

---

## Chapter 8. Managing Electronic Service Agent settings

Use Electronic Service Agent settings to change the basic information that is already entered during the activation process, or add more information. Changing information might be necessary when, for example, the contact or location information for your system changes.

---

### Providing IBM IDs

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

#### Registering a new IBM ID

##### About this task

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

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

#### Providing IBM IDs

##### Before you begin

For security and privacy, it is necessary that an IBM ID is associated with a specific system. Only the specified IDs can view the service information for that system. Authorizing users to view service information can be done by using the activation wizard or the Electronic Service Agent graphical interface.

**Tip:** You can also provide IBM IDs by using the **esacli activate** command. See **esacli activate**.

##### About this task

To authorize users to view service information by using Electronic Service Agent graphical interface, complete the following steps:

##### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Click **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 authorization**.

## Managing your IBM ID

### About this task

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

---

## Collecting and sending service information to IBM support

### Before you begin

Manually collecting and sending service information to IBM support is done by using the Electronic Service Agent graphical interface. Select **Help** from the graphical interface panels if you have questions about the specific panel or the information to enter.

### About this task

To manually collect and send service information to IBM support, complete the following steps:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Service information**. On this panel, you can see the types of service information that is collected, when they were last collected, and when they will be collected next.
3. Click **Collect information**. On this panel, you can see when service information was last sent to IBM support.
4. On the **Collect Service Information** panel, select the service information categories that you want to run.
5. Click **Run** and send the collected information to IBM support.

---

## Configuring operational settings

Configure operational settings to have Electronic Service Agent perform the functions that are important to your service environment.

### Before you begin

You can configure operational settings by using the Electronic Service Agent graphical interface. Select **Help** from the graphical interface panels if you have questions about the specific panel or the information to enter.

### About this task

To configure operational settings, complete the following steps:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Settings**.

3. Select the settings category for the settings that you want to configure or change. Click **Help** for detailed information about each panel. See, Chapter 6, “Using the Electronic Service Agent graphical user interface,” on page 19 for information about the Electronic Service Agent settings that you can change.

---

## Configuring your connection to IBM support

Electronic Service Agent can connect to IBM support through direct Internet (direct HTTPS connection) or service and support proxy connection paths. Electronic Service Agent uses these connection paths to send service information to IBM support.

### About this task

For instructions on configuring your connection to IBM support, see the following information for the connection type you want to use.

## Configuring a direct connection

Electronic Service Agent can connect to IBM support through a direct connection.

### Before you begin

Configuring a direct connection is done by using the Electronic Service Agent graphical interface. Select **Help** from the graphical interface panels if you have questions about the specific panel or the information to enter.

### About this task

To configure a direct internet connection, complete the following steps:

### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Settings**.
3. Select **Connectivity**.

## Configuring proxy connection

Electronic Service Agent can connect to IBM support through either the Service and Support proxy or a user supplied proxy.

For instructions on configuring your connection to IBM, see the following information for the proxy type you want to use.

### Configuring service and support proxy

Electronic Service Agent can connect to IBM support through a service and support proxy connection.

### Before you begin

Use the Electronic Service Agent graphical interface to configuring a service and support proxy connection. Select **Help** from the graphical interface panels if you have questions about the specific panel or the information to enter.

### About this task

To configure a service and support proxy connection, complete the following steps:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Settings**.
3. Select **Service & support proxy**.

### Configuring user-supplied proxy

Electronic Service Agent can connect to IBM support through a user-supplied proxy.

### Before you begin

Use the Electronic Service Agent graphical user interface to configure a proxy. Select **Help** from the graphical user interface panels if you have questions about the specific panel or the information to enter.

### About this task

To configure a proxy connection, complete the following steps:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Settings**.
3. Select **Connectivity**.

---

## Viewing the activity log

Use the activity log to see all Electronic Service Agent activity for a designated time period.

### Before you begin

You can view the activity log by 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 view the activity log by running the **esacli activity** command. See “esacli activity” on page 30.

### About this task

To view the activity log, complete the following tasks:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Activity log**.



---

## Collecting service information

Use **Service information** to collect service information that is related to hardware, software, system configuration, and performance.

### Before you begin

Use Electronic Service Agent graphical interface to collect and view service information. Select **Help** from the graphical interface panels if you have questions about the specific panel or the information to enter.

### About this task

To collect and view service information, complete the following steps:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Service information**.

---

## Exporting a configuration

You can export the configuration information from Electronic Service Agent to an XML file. You can import the same contact and location information and operational settings on another system.

### Before you begin

You can export a configuration by 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 export a configuration by running the **esacli export** command. See “esacli export” on page 39.

### About this task

To export a configuration, complete the following steps:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. From the Export/Import section of the Electronic Service Agent index page, click **Export**.
3. Click **Export settings** to export the configuration information to an XML file.

### Example

To view a sample configuration file, export the configuration to a file from the GUI of Electronic Service Agent. You can export either before or after the activation of Electronic Service Agent.

---

## Importing a configuration

You can import the configuration information from an 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

See “Exporting a configuration” on page 75 for information on creating a configuration file.

You can import a configuration by 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 import a configuration by running the **esacli import** command. See “esacli import” on page 45.

### About this task

To import a configuration, complete the following steps:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Import**.
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.

---

## Checking transmission of service information to IBM

Run an operational test to see whether the transmission of service information to IBM support is working correctly.

### Before you begin

Check whether the transmission of service information to IBM support is done by 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 check the transmission of information by running the **esacli test -o** command. See “esacli test” on page 67.

**Tip:** You can verify the event source connectivity using the **esacli test -i** for IMM definitions or **esacli test -m** for AMM or CMM definitions. See “esacli test” on page 67.

### About this task

To check the transmission of service information to IBM support, complete the following steps:

## Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
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 “Viewing the activity log” on page 74.

---

## Sending a test problem to IBM

To verify correct operation of Electronic Service Agent, send a test problem to IBM.

### About this task

You can send a test problem to IBM support by 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.

To send a test problem to IBM, complete the following steps:

1. Access and log on to the Electronic Service Agent.  
See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Problem information**.
3. Click **Send test problem**.  
A test problem with a status of **Detected** is generated.
4. Click **Refresh list of problems** until the problem shows a status of **Open**.
5. Select the test problem, select the **Display** action, and click **Go**.

**Tip:** You can also create a test problem by using the **esacli test -p** command.

To use **esacli** commands to send a test problem to IBM, complete the following steps:

1. Use the **esacli test** command to send a test problem to IBM.  
`esacli test --problem`
2. Use the **esacli problem** command to list all problems.

Problem list:

```
13d6cbc0974-16eff2f0 Open
```

You can list problems using either the problem ID **13d6cbc0974-16eff2f0** or the service request number **USE0DSG9RMP**.

3. Use the **esacli problem** command to list the details about the test problem.  
`esacli problem --id 13d6cbc0974-16eff2f0`

Problem information:

```
Service request:      USE0DSG9RMP
Status:              Open
Is test problem:     Yes
Problem description: Test symptom generated by
                    Electronic Service Agent
Problem severity:    2
Problem occurrence date/time: Tue Dec 13 08:38:27 CST 2011
Service request status: Open
```

Problem sent:	Yes
Number of attempts:	1
Last changed:	Tue Dec 13 08:41:46 CST 2011
Error code:	ElectronicService.Test

For more information, see “esacli test” on page 67

---

## Specifying message severity

You can specify the message severity level that must be recorded during Electronic Service Agent activity.

### Before you begin

You can specify the message severity level that must be recorded by 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.

### About this task

To specify the message severity level that must be recorded, complete the following steps:

#### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Settings**.
3. Select **Trace level**.
4. Select the trace level for the message severity you want recorded during the Electronic Service Agent application’s activity.

**Tip:** You can specify the level of message logging by using the **esacli logSettings** command.

---

## Specifying contact and location information

You can specify contact and location information by using the Electronic Service Agent graphical interface.

### Before you begin

You can change the basic information that is already entered or add more information to better identify the contact and location. Select **Help** from the graphical interface panels if you have questions about the specific panel or the information to enter.

**Tip:** You can also specify contact and location information by running the **esacli activate** command. See “esacli activate” on page 27.

### About this task

To specify contact and location information, complete the following steps:

## Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
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.

**Tip:** You can specify or change contact information by using the **esacli contactSettings** command.

**Tip:** You can specify or change the system location information by using the **esacli locationSettings** command.

---

## Starting Electronic Service Agent

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

### Procedure

- To start Electronic Service Agent in Windows, navigate to `<esa_install_location>\IBM\ElectronicServiceAgent\bin` and run the **esacli start** command.
- To start Electronic Service Agent in Linux, navigate to `/opt/ibm/esa/bin` and run the **esacli start** command.

---

## Stopping Electronic Service Agent

When you stop Electronic Service Agent, it stops collecting and sending service information. You must restart it to activate these functions. If you want to stop sending service information but continue to use the other Electronic Service Agent graphical interface functions, suspend Electronic Service Agent and resume it when you want to start sending information.

### Before you begin

See, “Suspending and resuming Electronic Service Agent”

### Procedure

- To stop Electronic Service Agent in Windows, navigate to `<esa_install_location>\IBM\ElectronicServiceAgent\bin` and run the **esacli stop** command.
- To stop Electronic Service Agent in Linux, navigate to `/opt/ibm/esa/bin` and run the **esacli stop** command.

---

## Suspending and resuming Electronic Service Agent

Electronic Service Agent stops collecting and sending of service information when it is suspended. However, the other Electronic Service Agent graphical interface functions continue to operate. If the system is rebooted while Electronic Service Agent is suspended, monitoring automatically resumes when the system is restarted.

## About this task

To suspend or resume Electronic Service Agent, complete the following tasks:

### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Status**.
3. Select **Suspend** or **Resume**.

**Note:** When Electronic Service Agent is running, the **Resume** and **Suspend** options are available.

**Tip:** You can suspend monitoring of Electronic Service Agent by using the **esacli suspend** command and resume monitoring of Electronic Service Agent by using the **esacli resume** command.

---

## Updating notification settings

Use the **Notifications** panel to define email notification and SNMP trap settings. Electronic Service Agent uses the information to send problem notifications to the locations you specify.

### About this task

To update notification settings, complete the following tasks:

### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Settings**.
3. Select **Notifications** and enter the information for the email notifications and SNMP traps you want to send. Select **Help** from the graphical user interface panels if you have questions about the specific panel or the information to enter.

**Tip:** You can define email and SNMP trap notification settings by using the **esacli notificationSettings** command.

---

## Checking system heartbeat

Operational tests of Electronic Service Agent help you check the heartbeat of your system. You can schedule a system heartbeat test to run automatically by using both CLI commands and the graphical user interface. You can also manually check the system heartbeat, when required.

## Scheduling a system heartbeat test

### About this task

To schedule a system heartbeat test to run automatically by using the Electronic Service Agent graphical user interface, complete the following tasks:

## Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Click **Settings**.
3. Click **Operational Tests**.
4. Make the modifications as required.

**Tip:** You can schedule a system heartbeat test to run automatically by using the CLI commands by using the options that are specified in `esacli opTestSettings`. See, “`esacli opTestSettings`” on page 55.

## Testing the system heartbeat manually

You can test the system heartbeat manually by using both the CLI and the graphical user interface.

### About this task

To test the system heartbeat manually using the Electronic Service Agent graphical interface, complete the following tasks:

### Procedure

1. Access and log on to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Click **Service information**.
3. Click **Run operational test**.

**Tip:** You can test the system heartbeat manually by running the `esacli test -o` command.

## Enabling email notification when heartbeat test is performed

The `esacli opNotificationSettings` command should only be run when directed by IBM service. This command is disabled by default.

### About this task

To enable email notification for manual or automatic heartbeat (operational) tests, specify a SMTP server hostname, port an email address that ends in **ibm.com**.

### Example

```
esacli opNotificationSettings -e true -h smtp.gateway.com -p 25 -m email@ibm.com
```

See, “`esacli opNotificationSettings`” on page 53





---

## Chapter 9. Update Electronic Service Agent

You can download and install the latest Electronic Service Agent updates.

---

### Updating Electronic Service Agent by using the graphical user interface

To modify the frequency and time for download and install Electronic Service Agent updates by using the graphical user interface, complete the following tasks:

#### Procedure

1. Access and log in to the Electronic Service Agent. See “Accessing the Electronic Service Agent graphical user interface” on page 19.
2. Select **Update**.
3. Select **Download and Install Latest Updates**. If updates are downloaded and installed, Electronic Service Agent restarts automatically. You must log in again.

**Tip:** You can schedule automatic downloads and installations of Electronic Service Agent updates. From the **Update** page, set a download and installation frequency in number of days, and the time of day. Your system is not restarted when updates are automatically downloaded and installed.

---

### Updating Electronic Service Agent by using `esacli updateSettings` command

To modify the frequency and time for downloading and installing Electronic Service Agent updates by using `esacli updateSettings` command, complete the following tasks:

#### Procedure

- View the existing settings by running the `esacli updateSettings -d | --display` command.
- Modify the setting by running the `esacli updateSettings <-e | --enable> true <-i | --interval> value <-x | --time> value` command.

#### Related reference:

“`esacli updateSettings`” on page 69

Use the `esacli updateSettings` command to set and display information about how often the Electronic Service Agent checks for program updates.



---

## Chapter 10. IBM Electronic Services

Electronic Services provides a coordinated end-to-end electronic service between you and IBM support.

It provides a mechanism across a broad array of configurations and products. This becomes increasingly important as you run heterogeneous, disparate environments and are seeking a means to simplify the complexities this causes.

IBM Electronic Services is the technical support infrastructure that is offered to IBM customers as a no additional charge offering. With this offering, you can receive 24-hour-a-day access to IBM support. This offering emphasizes use of the Internet and other electronic databases to access IBM products and services.

The benefits of IBM Electronic Services include the following:

- As an IBM Maintenance Agreement or Warranty Customer, you'll get 24-hour access to IBM technical support and enhanced problem resolution and problem prevention capabilities.
- Higher availability, shorter downtime
- Consistent worldwide service and support
- Single portal to IBM support for customizable and comprehensive support information
- Routing of calls to the correct resource the first time, with required information

IBM Electronic Services is comprised of Electronic Service Agent and the Electronic Services functions.

---

### Accessing the IBM Electronic Services website

<https://www.ibm.com/support/electronic/portal>

Use the Electronic Services website to view service information reported by Electronic Service Agent. Use the Premium Search function, open and manage service requests, receive support messages by platform or individual, and customize the site to your preferences.

**Note:** To use some of the functions that are found on the Electronic Services website, such as viewing service information, you must supply an IBM ID. See “Providing IBM IDs” on page 71 for details about associating your IBM ID to your system.



---

## Chapter 11. Uninstalling Electronic Service Agent

Uninstalling Electronic Service Agent removes the Electronic Service Agent software and configuration information from your system.

### Before you begin

Before you uninstall Electronic Service Agent, consider whether you want to use this system's existing configuration information on another system or later on this system. If you want to use this system's configuration at a later time, export the information to a file. To export your existing configuration information to a text file, see "Exporting a configuration" on page 75.

### About this task

To uninstall Electronic Service Agent, use one of the following methods:

- Uninstalling by using Windows Control Panel.
- Uninstalling by using uninstallation program.
- Uninstalling in silent mode.

---

### Uninstalling Electronic Service Agent by using Windows Control Panel

#### About this task

To uninstall Electronic Service Agent using Control Panel in Windows, complete the following tasks:

#### Procedure

1. Navigate to **Start, Control Panel → Add or Remove Programs**.
2. Select to remove **IBM Electronic Service Agent**.

---

### Uninstalling Electronic Service Agent by using uninstallation program

#### About this task

To uninstall Electronic Service Agent using uninstallation program, complete the following tasks depending on your operating system:

#### Procedure

- On Windows, run the uninstallation program that is found in the `<esa_install_location>/ElectronicServiceAgent/uninstall` directory.
- On Linux, run the uninstallation program that is found in the `/opt/ibm/esa/uninstall` directory.

---

### Uninstalling Electronic Service Agent in silent mode

#### About this task

To uninstall Electronic Service Agent in the silent mode, perform the following tasks depending on your operating system:

## Procedure

- On Windows, edit the `installer.properties` file that is found in the `<esa_install_location>/ElectronicServiceAgent/uninstall` directory as described by the comments in that file and run the uninstallation program.
- On Linux, edit the `installer.properties` file that is found in the `/opt/ibm/esa/uninstall` directory as described by the comments in that file and run the uninstallation program.

---

## Chapter 12. Troubleshooting and limitations

Use this section to troubleshoot and resolve problems with Electronic Service Agent.

---

### Electronic Service Agent fails to apply Platform Agent update

This problem occurs when Electronic Service Agent attempts to automatically update Platform Agent when a version of Platform Agent exists on the system.

#### Problem

When Electronic Service Agent updates Platform Agent when a version is already installed, the following message is written to the Activity Log:

```
Failed to apply Platform Agent update: dir6.3.1_platform_agent_linux_x86
Reason By running the installer non-interactively, you have agreed to the
stated license terms under the license directory of the installed program
```

#### Explanation

This message means that the system already has a version of the Director Platform Agent at the same or a higher level.

#### Resolution

No action is necessary. Electronic Service Agent uses the agent that is already on the system.

---

### The -d output bat script does not recognize comments as remarks to be skipped

This problem occurs when you try to use the **-d script** option to generate the command and all of its options in an executable script or batch format.

#### Problem

The -d output bat script does not recognize comments as remarks to be skipped.

#### Explanation

Many of the esacli settings commands have an option **-d script**, which generates the command and all of its options in an executable script or batch format.

#### Resolution

You might need to edit and rearrange the content from the **-d script** option from the various esacli settings commands before you run the script.

Supply the required fields when the command is enabled (**enable = true**).

When the command is disabled (**enable = false**), supply only those fields that might be required (such as **type**) and comment out the remaining values.

For Linux, use the comment character # sign and for Windows, use **rem**.

**Note:** Add line continuations for any values that are on separate lines within the script (\ for Linux and ^ for Windows).

---

## Non-required values are not commented out when -d script is set to false

This problem occurs when you set **-d script** to false and run the command.

### Problem

Within a script or batch file, when the command is disabled (**enable = false**), the type and enable values must be set and the remaining lines must be commented out. The script or batch output from **esacli serviceSettings -type <hw | sw> -d script** might need modifications when the command is disabled.

### Explanation

serviceSettings command does not comment out the non-required values when **-d script** is set to false.

### Resolution

When the command is disabled (**enable = false**), edit the script or batch file to leave type and enable defined, but comment the remaining lines in the script.

For Linux, use the comment character # sign and for Windows, use **rem**.

**Note:** Add line continuations for any values that are on separate lines within the script (\ for Linux and ^ for Windows).

---

## Electronic Service Agent fails to test connectivity for ESXi system

When you click **Test connection** on **ESXi Settings** window, the **ESXi connection test Failed** error message occurs.

### Problem

Test connection from Electronic Service Agent to ESXi system fails with an error message, **ESXi connection test Failed**.

### Explanation

The **ESXi connection test Failed** message signifies that the Electronic Service Agent is unable to connect to the ESXi system.

### Resolution

Perform the following steps to resolve the issue:

1. Make sure that the ESXi system is SSH enabled.
2. Log in to ESXi system.
3. Run the command **vi /etc/ssh/sshd\_config** to open the **sshd\_config** file.
4. Change password authentication to 'yes'.



PasswordAuthentication = yes

5. Save the changes.

---

## The test -c showing connections to IBM fails from Electronic Service Agent

When you use the test -c command from Electronic Service Agent, the **Connections failure** error message occurs.

### Problem

Connections to IBM are failing from Electronic Service Agent.

### Explanation

The **Connections failure** message signifies that the Electronic Service Agent is failing to connect to IBM to do call home.

### Resolution

Check the following items to resolve the issue:

1. Check the firewall settings of ESA installed system.
2. Check whether there are any issues with the DNS resolver. Use the following commands to verify:
  - nslookup <failing hostname>
  - nslookup <failing IP address>
3. Verify whether the port '80' or '443' is open on ESA installed system.
4. Verify the connectivity to the failing hosts with the following commands:
  - telnet www.ibm.com (http://www.ibm.com)
  - telnet www-03.ibm.com
  - ping www.ibm.com (http://www.ibm.com)
  - ping www-03.ibm.com



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