

How to Access the SBC

In this section:

- [EMA](#)
- [EMA in Platform Mode](#)
- [Command Line Interface](#)
- [Baseboard Management Controller](#)
- [SOAP API](#)
- [REST API](#)
- [Insight EMS SBC Manager](#)

 Related articles:

- [Logging Into EMA](#)
- [Logging Into CLI](#)
- [Logging On to EMA in Platform Mode](#)
- [Logging Into BMC](#)
- [Accessing SOAP API](#)
- [Accessing REST API](#)

- [SBC SOAP API \(EMS\)](#)
- [REST API User's Guide](#)

The primary interfaces used to access the SBC are the Embedded Management Application (EMA) GUI, EMA in Platform Mode GUI, Command Line Interface (CLI) and BMC (Baseboard Management Controller) GUI, Representational State Transfer Application Processing Interface (REST API) and Simple Object Access Protocol Application Processing Interface (SOAP API).

EMA

The EMA provides an easy method to provision, maintain and administer the SBC platform from any Web browser. This is the most frequently used access method. For more details, refer to the [EMA User Guide](#).

For login details, see [Logging Into EMA](#).

EMA in Platform Mode

The EMA in Platform Mode provides current status of the platform, application software version information and system information. The EMA in Platform Mode is also used to start, stop and restart the application as well as reboot the host. The EMA in Platform Mode supports upgrading the operating system and application. Additional features include a web interface for generic troubleshooting activities, security and remote access management.

For more information, refer to [Logging On to EMA in Platform Mode](#).

Command Line Interface

Command Line Interface (CLI) is the traditional method to configure systems from any machine with network access using a secure shell (SSH) client terminal emulator).

For login details, refer to [Logging Into CLI](#).

Baseboard Management Controller

The Baseboard Management Controller (BMC) supports the following functions:

- View basic system information
- Change mouse mode
- Configure BMC and EMA in Platform Mode network settings
- Add, edit or remove users
- Configure NTP settings
- View or change SSL certificate
- Perform remote control settings
- Update BMC firmware and reboot BMC

- Switch to EMA in Platform Mode
- Integrated Lights Out Management (LOM)

For login details, refer to [Logging Into BMC](#)



Not applicable to SBC Software Edition.

SOAP API

SBC Core SOAP APIs provide access to Simple Object Access (SOAP) API which is protocol specification used to exchange structured information in the implementation of web services. It uses XML information set for its message format, and usually relies on other application layer protocols, such as Hypertext Transfer Protocol (HTTP) or Simple Mail Transfer Protocol (SMTP), for message negotiation and transmission. The advantage of using SOAP is that it is very versatile and use different transport protocols. The standard stacks use HTTP as a transport protocol.

The SBC SOAP API supports the following requests for each managed object:

- CREATE – creates a managed object in the SBC.
- UPDATE – updates a managed object in the SBC.
- DELETE – deletes a managed object in the SBC.
- SHOW – retrieves managed object details from SBC.
- User defined operations – For example, manual switchover of the SBC.

The EMS application maps each SOAP request to the corresponding REST request towards the SBC. In network configurations where EMS is deployed, the EMS is also used to configure SBC Core using SOAP API for SBC. This interface supports provisioning as well the operations exposed by the yang models. For details, refer to the EMS document [SBC SOAP API](#).

For access details, refer to [Accessing SOAP API](#).

REST API

REST APIs provide access to REpresentational State Transfer (REST) API which is a simple, stateless architecture style (not a protocol) that uses the HTTP/HTTPS method (such as GET, PUT, POST, DELETE) to retrieve the management information from the database. The main advantage is its simple interfaces and can be modified while the application is running.

REST has the following properties:

- Stateless: No client context is stored on the server. A request from the client will contain all the necessary information required to process the request.
- Client-Server model: In a client-server model, clients are associated with the user interface, and the servers manage data storage behind the interface. This allows a separation between the client and server.
- Cacheable: Improvement in scalability and performance when the client caches responses.
- Language-independent: REST API uses open standards. Any language may be used to access the API (C++, Java, etc.) resources via URI paths.

To use a REST API, your application makes HTTPs requests and parses the responses. Currently, the only supported response format is XML. The methods used by developers are standard HTTP methods such as GET, PUT, POST, PATCH and DELETE. For details, refer to [REST API User's Guide](#).

For access details, refer to [Accessing REST API](#).

Insight EMS SBC Manager

If your network is configured with Insight EMS platform, the SBC is accessible using SBC Manager application on the EMS. To access the SBC from EMS, under "Element Management" select the "SBC Manager" icon which launches a new window for the SBC web interface. As with other nodes managed by the Insight EMS, the SBC must be configured as a Managed Node. Use the Insight Administration tab to add the SBC as a Managed Node.

