



# CHAPTER 1

## General

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The Cisco ANA shell comprises the following main components which require command-line management:

- Cisco ANA shell client.
- Unit process and VNE.

All these components should support the same interface behavior.

## Users

Two types of users are expected to use the Cisco ANA shell interface:

- **Network Operators**—Responsible for network operation tasks such as surveillance and provisioning.
- **Cisco Technicians**—Responsible for low-level system maintenance, debugging, and fine-tuning.

## Description

The Cisco ANA shell serves as the front-end of the system and provides services to the end-user. It unifies the operations of all the system components and requires the following services to be supported by the system components:

| Component | Services Required from the Component                                                   |
|-----------|----------------------------------------------------------------------------------------|
| Gateway   | All required surveillance and provisioning commands should be supported by the gateway |
| AVM       | Should support management operations at AVM level, such as starting a new AVM.         |
| VNE       | Should support VNE management operations, such as starting and stopping VNEs.          |

# Glossary

This section defines the different types of parameters that can be used as arguments in the Cisco ANA shell commands. All the parameters of the commands are strings in one of the formats provided in this document.

|             |                                                                                                                                                                                                         |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type        | string                                                                                                                                                                                                  |
| Description | List of characters. If the string is not quoted, it must not contain white spaces. If the string contains white spaces, it must be quoted. To use quotes inside a string, escape them with a backslash. |
| Format      |                                                                                                                                                                                                         |
| Example     | user1<br>" the string \"string\""                                                                                                                                                                       |
| Remark      | How to deal with strings with white spaces?                                                                                                                                                             |

|             |                                                                   |
|-------------|-------------------------------------------------------------------|
| Type        | name                                                              |
| Description | The same as string. Used for clarity, for example as device name. |
| Format      |                                                                   |
| Example     | user1                                                             |

|             |                                   |
|-------------|-----------------------------------|
| Type        | integer                           |
| Description | A string representing an integer. |
| Format      |                                   |
| Example     | 352                               |

|             |                                                                                 |
|-------------|---------------------------------------------------------------------------------|
| Type        | VC                                                                              |
| Description | Identifier of an ATM VC.                                                        |
| Format      | <Integer>["f"<Integer>]<br>Both integers must be at the range specified by ATM. |
| Example     | 1/102                                                                           |

|             |                 |
|-------------|-----------------|
| Type        | ip (=IPAddress) |
| Description | IP address.     |
| Format      | X.X.X.X         |
| Example     | 192.168.1.2     |

|             |                                                                          |
|-------------|--------------------------------------------------------------------------|
| Type        | filename                                                                 |
| Description | A valid filename on the operating system on which the client is running. |

|         |                                                   |
|---------|---------------------------------------------------|
| Format  | String                                            |
| Example | path1.snc<br>/export/home/sheer1.3/Main/path2.snc |

|             |                                             |
|-------------|---------------------------------------------|
| Type        | Date                                        |
| Description | String representing date and time.          |
| Format      | UNIX date format in the default C location. |
| Example     | Mon Jul 22 16:56:25 IDT 2002                |

