



## **Configuring X25 Generic Interface**

Teldat-Dm 773-I

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## I Related Documents

Teldat-Dm 707-I X25 Configuration

Teldat-Dm 772-I Common Configurations for Interfaces

# Chapter 1 Configuring Generic X25 interface

## 1.1 Introduction

This chapter describes the function of Generic X25 Interface.

The information given in this chapter is divided into the following sections:

- (1) Creating the Generic X25 Interface.
- (2) Configuring the Generic X25 Interface.

## 1.2 Creating the Generic X25 Interface

Should you wish to aggregate an Generic X25 Interface, you must enter the following command:

```
Config>add device x25 <identifier>
```

where <identifier> is a complete number (between 1 and 10000) used to differentiate and identify a specific interface from among all the existing interfaces of the same type.

*Example:*

```
Config>add device x25 ?
<1..10000>      Interface Id
Config>add device x25 1 ?
<cr>
Config>add device x25 1
Config>
```

You can check that the new interface has been correctly added by listing the current interfaces present in the router (and verifying that the *Generic X25* interface has been generated):

```
Config>list devices

Interface          Connector      Type of interface
-----
ethernet0/0        LAN1           Fast Ethernet interface
serial0/0           SERIAL0/WAN1  X25
serial0/1           SERIAL1/WAN2  X25
serial0/2           SERIAL2/WAN3  X25
bri0/0             BRI/ISDN1     ISDN Basic Rate Int
x25-node           ---           Router->Node
x25-1              ---           Generic X25
Config>
```

The Generic X25 Interface is one of the interfaces which acts as 'user' for the synchronous base interfaces. This deals with a logical interface devoid of a physical connector.



### Note

Please remember that you must save any changes made to the configuration and restart the router in order for the changes to take effect.

## 1.3 Configuring the Generic X25 Interface

In order to configure a Generic X25 Interface you need to enter **NETWORK <interface\_name>** in the general configuration menu, where **interface\_name** is the name of the associated interface. For example to access the x25-1 interface, you need to enter:

```
Config>network x25-1

-- Generic X25 User Configuration --
x25-1 config>
```

There are certain commands which are common to all the device interfaces. These commands are described in the common interfaces configuration manual (Teldat-Dm772-1 Common Configuration Interfaces).

The following are the options presented in the Generic X25 interface configuration menu:

```
X25 config>?
  base-interface   Access the base interface configuration menu
  x25              Set X25 parameters
  exit
X25 config>
```

### 1.3.1 BASE-INTERFACE

Through the **BASE-INTERFACE** command you can access the base interface configuration menu (in this case a synchronous serial interface). In the *x25-X Base IFC config>* configuration menu, the parameters related with the X25 link association over a synchronous serial interface are specified.

```
X25-X config>base-interface
-- Base Interface Configuration --
x25-X Base IFC config>
```

The following commands are available from the *x25-X Base IFC config>* prompt:

```
X25-X Base IFC config>?
  base-interface   Specify a base interface
  list             List current configuration
  no               Negates a command or sets its defaults
  exit
x25-X Base IFC config>
```

#### 1.3.1.1 BASE-INTERFACE

The **BASE-INTERFACE** command permits you to specify the associated synchronous serial interface.

**Syntax:**

```
X25-X Base IFC config>base-interface <interface> link
X25-X Base IFC config>
```

**Example:**

```
X25-1 Base IFC config>base-interface ?
<interface>   Base interface
X25-1 Base IFC config>base-interface serial0/0 ?
  link        Add this interface to the dial group
X25-1 Base IFC config>base-interface serial0/0 link
X25-1 Base IFC config>
```

#### 1.3.1.2 LIST

This command permits you to view the options configured in the base interface section.

```
X25-1 Base IFC config>list

  Base Interface      Profile Name      Base Circuit Id  Number of circuits
  -----
  serial0/0 sync/0          1                1
x25-1 Base IFC config>
```

“**Base interface**” this refers to the name of the base interface the X25 interface uses (in this case it must be the number of the associated synchronous serial interface). The text that appears after the interface name (sync/0) provides information on the interface type.

#### 1.3.1.3 NO

##### 1.3.1.3.1 NO BASE-INTERFACE

The **NO BASE-INTERFACE** command permits you to delete the current association with a base interface. You must specify the number of the serial interface as a parameter.

```
X25-1 Base IFC config>no ?
  base-interface   Specify a base interface
```

```
x25-1 Base IFC config>no base-interface ?
<interface>      Base interface
x25-1 Base IFC config>no base-interface serial0/0 ?
<cr>
x25-1 Base IFC config>no base-interface serial0/0
x25-1 Base IFC config>
```

### 1.3.1.4 EXIT

This command exits the *x25-X Base IFC config>* configuration prompt.

```
X25-X Base IFC config>exit
X25-X config>
```

## 1.3.2 X25

The **X25** command takes you to the X25 configuration prompt.

```
X25-X config>x25

-- X25 user configuration --
X25-X X25 config>
```

The commands that can be used in the X25 configuration menu are the same as those described for traditional X25 interfaces.

## 1.3.3 EXIT

Through the EXIT command, you return to the *Config>* general configuration prompt.

*Example:*

```
X25-1 config>exit
Config>
```

## Chapter 2 Monitoring Generic X25 Interface

### 2.1 Generic X25 Interface Statistics

The Generic X25 Interface statistics are displayed by entering the **DEVICE** command followed by interface name for the statistics you wish to obtain at the monitoring prompt (+).

```
+DEVICE X25-1

Interface          CSR   Vect   Auto-test   Auto-test   Maintenance
                valids  failures failures
X25-1              0     0       0           1           1
+
```

### 2.2 Monitoring the Generic X25 Interface

#### 2.2.1 Accessing the Generic X25 monitoring prompt

In order to access the generic X25 monitoring prompt, you need to enter **NETWORK** following by the interface name.

```
+NETWORK X25-1
-- X25-DIAL Console --
X25-X Dial+
```

#### 2.2.2 Generic X25 monitoring commands

All Generic X25 interface monitoring commands must be entered at the prompt specified above, *x25-X Dial+*.

The available commands are described below.

##### 2.2.2.1 ? (HELP)

This command permits you to view the available options from the menu you are in and to list the possible command options when you enter this after the command. The commands available in the corresponding console menu for monitoring Generic X25 are as follows:

```
X25-X Dial+?
BASE-INTERFACE
X25
EXIT
X25-X Dial+
```

##### 2.2.2.2 BASE-INTERFACE

The **BASE-INTERFACE** command takes you to the monitoring prompt for the parameters related to the base interface.

```
X25-X Dial+BASE-INTERFACE
Base Interface Console
X25-X Base IFC+
```

The following commands are available at this level:

##### 2.2.2.2.1 ? (HELP)

This lists the available commands.

```
X25-X Base IFC+?
LIST
EXIT
X25-X Base IFC+
```

### 2.2.2.2.2 LIST

Displays the parameters related to the base interface.

*Example:*

```
X25-X Base IFC+LIST
Destination address  :
Local address       :
Base interface      : serial2/0
Circuit id request  : 1
Dial circuit status : OPEN
Circuit id assigned : 1
X25-X Base IFC+
```

The meaning of the information displayed is as following:

“**Destination address**”, this is the link destination address i.e. the ISDN number called.

“**Local address**”, local address (Local ISDN number).

“**Base interface**”, base interface name or identification (BRI ISDN).

“**Circuit id request**”, the number of the channel through which you request X25 link establishment.

“**Dial circuit status**”, current circuit status. The possible values are:

*OPEN*, the circuit is open (established).

*CLOSED*, the circuit is closed (not established).

*DOWN*, the BRI ISDN interface is not active.

“**Circuit id assigned**”, the circuit number (channel B) associated to the link.

### 2.2.2.2.3 EXIT

Exits the monitoring prompt for the parameters related to the base interface.

```
X25-X Base IFC+EXIT
X25-X Dial+
```

### 2.2.2.3 X25

Through this command you can access the monitoring menu for X25 interface's own parameters. These are described in more detail in manual Teldat-Dm 707-I X25 Configuration.

```
X25-X Dial+X25
X25+
```

### 2.2.2.4 EXIT

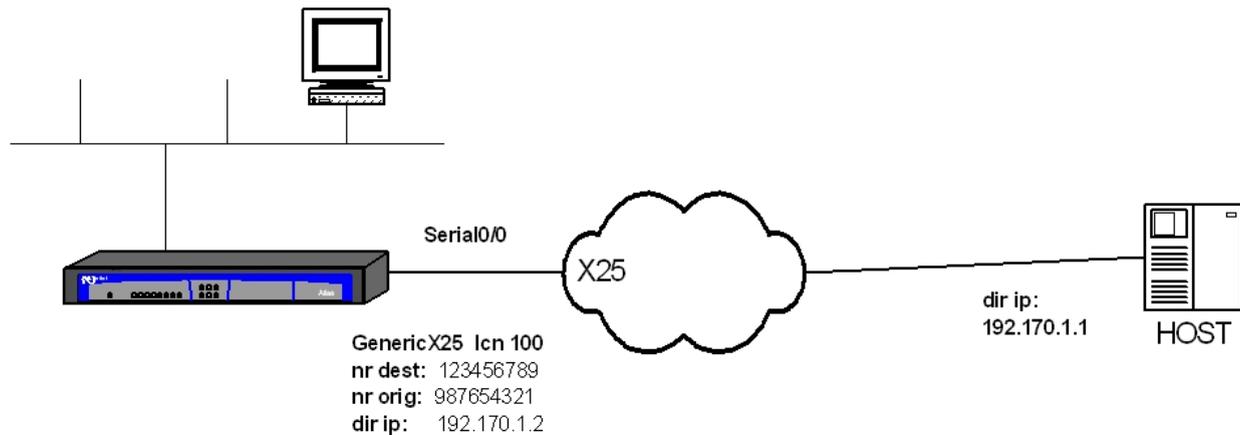
The **EXIT** command exits the Generic X25 interface monitoring prompt and returns to the previous prompt.

```
X25-X Dial+EXIT
+
```

## Chapter 3 Generic X25 Interface Configuration - Example

### 3.1 Generic X25 Interface configuration example

Supposing we have a scenario such as the one that is displayed in the below figure. This deals with accessing a HOST through an X25 circuit through the serial0/0 serial interface.



#### Configuration example

To do this, simply add an X25 dial interface and associate it to the serial0/0 base interface.

This base interface must be configured as a synchronous interface.

Once this has been done, the configuration is exactly the same as that executed for a traditional serial line X25 interface but using the new x25-x interface as a reference in the configuration for routing, facilities, etc.

The resulting configuration is as follows:

```
; Showing System Configuration for access-level 15 ...
; ATLAS Router 2 156 Version 10.7.0-Alpha

log-command-errors
no configuration
set hostname ATLAS
add device x25 1
set data-link sync serial0/0
;
;
network serial0/0
; -- Interface Synchronous Serial Line. Configuration --
    speed 2048000
exit
;
;
network x25-node
; -- X25-node interface configuration --
    ip address 192.170.1.2 255.255.255.0
;
;
;
;
exit
;
network x25-1
; -- Generic X25 User Configuration --
    x25
; -- Generic X25 User Configuration --
    set interface-direction dce
    set na-calling 987654321
    set speed 2048000
exit
```

```
;
  base-interface
; -- Base Interface Configuration --
  base-interface serial0/0 link
;
  exit
;
exit
;
node x25
  address 192.170.1.1 na-value 123456789
;
  routing 1 port x25-1 na-value 123456789
;
  routing 2 port ip-router na-value 987654321
;
exit
;
;
;
dump-command-errors
end
; --- end ---
```