

Technical setup

Configuration information

Procedure	Procedure version	Date changed	Block	
Technical Setup	3.1	01 June 2007	3	

Procedure overview

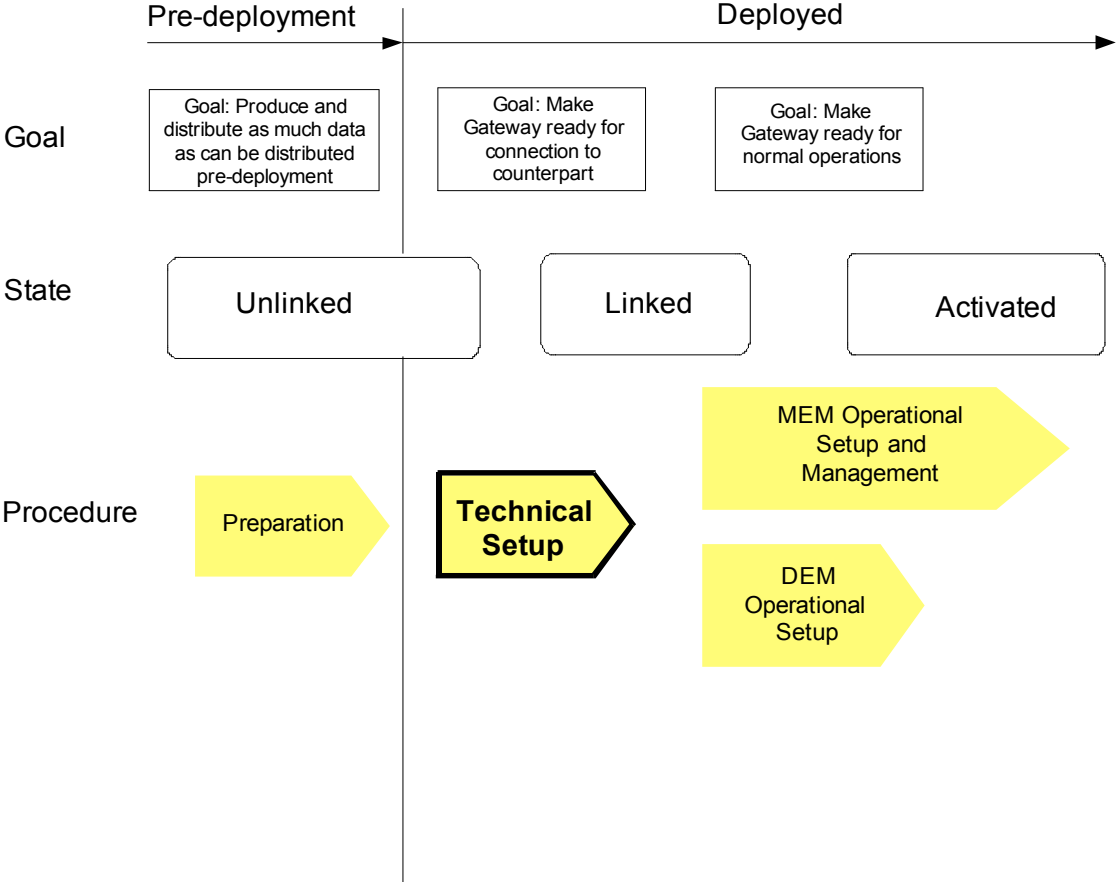
Aim	Make the gateway ready for connection to counterpart.
Initial state	<ol style="list-style-type: none">1. Preparation stage completed successfully.2. The national system with GW is on-site.3. The national system with GW is off-line.4. MIP LAN and National LAN established. <p>GW is in state 'Unlinked'</p>
End state	<ol style="list-style-type: none">1. The national system with GW is on-line. (IP-connection to the network is verified. Counterpart system may or may not be connected).2. National C2IS is verified to be connected and operational.3. Ready to open a session with counterpart. <p>GW is in state 'Linked'</p>
Input	<ol style="list-style-type: none">1. Own DEM Connection Information.2. Network topology description.
Output	
Estimated effort	

Context

Intended users	MIP GW Operator, MIP GW Administrator.
Type of procedure	MOP.
Comments	

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Procedure details

1 Technical Setup

1.1 Deployment of the MIP Gateway

After obtaining the location, technical and security information from the operation or exercise CEOI, the GW may be deployed according to national procedures.

1.2 MEM Technical Setup

1.2.1 Configuration of the MIP Gateway

Configure the Mailer for :

- all the national mailboxes that may use the service of the MIP Gateway,
- all other Mailers that may use the service of the MIP Gateway

by entering the Host Name(s), Host IP Address(es), and ESMTTP e-mail Address(es) according to the CEOI. Start the GW's mailer with the above-configured parameters.

National mailboxes not described in the CEOI will not be reachable through the MIP MCI.

E-mail addresses managed by Higher HQs might change but the information described above must still be provided.

1.2.2 Connection of the Gateway to the National Network

Connection of the Gateway to the national Network (including verification of both the Network connection and Mailer Configuration between the Gateway and the national CIS) should be according to national procedures.

1.2.3 Connection to the MIP Network

Cabling and connectors (in accordance with MTIDP) between the GW and the MIP Network are provided according to the CEOI.

1.2.4 Verification of the Network Connection between Paired Gateways

The recommendation is to ping each pairing GW identified in the CEOI by using its IP address (sometimes fire-walls prevent the use the ping). This confirms network connectivity.

Then each address should be pinged using its full qualified name ("host.domain" or, e.g. "ODB1.LCSS.MIL.CA"), this confirms host name, IP, lookup resolution.

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An alternative to ping if a firewall prevents it is to telnet the Nation's MEM Mailer port 25. If the Mailer is operational, the Mailer will answer the telnet.

1.2.5 Verification of the Mailer Configuration between Paired Gateways and/or CIS

The recommendation is to mail each host identified in the CEOI with a Verify Configuration message. The MEM System Administration Form, indicating 'VERIFY CONFIGURATION', may be used for this purpose. The Mailer is correctly configured when all the recipients correctly receive the message and return a successful DSN (delivery status notification).

1.3 DEM Technical Setup

1.3.1 Configuration of the MIP Gateway

After the physical start-up is completed, the GW must be configured for the national LAN and the MIP LAN, entering the assigned IP addresses and the MIP LAN Subnet Mask in accordance with national procedures.

1.3.2 Connection of the Gateway to the National LAN

Cabling and connectors in accordance with MTIDP between the GW and the national CIS are provided by the national LAN. At this point, the GW is off-line for the other nations.

1.3.3 Verification of the LAN Connection between Gateway and National CIS

If it is necessary for the national C2IS to be functioning before the MIP Gateway can be established, connectivity between the national LAN and the MIP Gateway must be verified.

1.3.4 Network Topology Description

The network topology description is handled according to national procedures.

1.3.5 Connection to the MIP LAN

Cabling and connectors (in accordance with MTIDP) between the GW and the MIP LAN are provided according to the CEOI.

1.3.6 Exchange of DEM Connection Information

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There are three different ways in which the DEM Connection Information of the other nodes on the network can be loaded into the system:

- Automatic message exchange
- Manual message exchange
- Direct entry

1.3.6.1 Automatic message exchange

Under automatic message exchange, a node sends out its own DEM Connection Information by UDP broadcast. Any node, that wishes to do so, may reply to the broadcast by sending its own DEM Connection Information. The received messages will be processed by the system.

1.3.6.2 Manual message exchange

Under manual message exchange, a MIP gateway operator distributes an XML file electronically to another operator who in turn loads the file into his/her gateway. The file must conform to the MIP XSD for DEM Connection Information. DEM software should be able to process these files automatically to eliminate the possibility of operator error.

1.3.6.3 Direct entry

Under direct entry, the required DEM Connection Information details are manually entered into a MIP gateway. The details are supplied either verbally or on paper. As manual entry of the data is excessively prone to error, this method should only be used as a last resort.

1.3.6.4 Establish a Connection

Just because the DEM Connection Information has been exchanged does not mean that a connection can be established. If the release or version numbers are different in the two systems it might not be possible to establish a connection.

It is a national implementation issue as to how a connection is established. Once a connection has been established, there is then a seamless transition into DEM Operational Setup. The connecting node receives the other node's available OIG list automatically following a successful connection.

1.3.7 Verification of the LAN Connection between Paired Gateways

In the event of it not being possible either to exchange DEM Connection Information or to establish a connection with one or more other nodes, it will be necessary to verify the LAN connection between paired gateways.

If a network topology description is available there is an option for the operator to verify the network configuration.

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The recommendation is to ping each pairing GW identified in the CEOI by using its IP address (sometimes fire-walls prevent the use the ping). This confirms network connectivity.

An alternative to ping if a firewall prevents it is to telnet the DEM port.