IBM Connect:Direct for Unix 6.4.0

IBM Sterling Connect:Direct for Unix
Capgemini, IBM Partner
This Presentation is available at:
\\gurnto32\IBM Dubois\Work Area\CD 6.4+\CDU\Features\



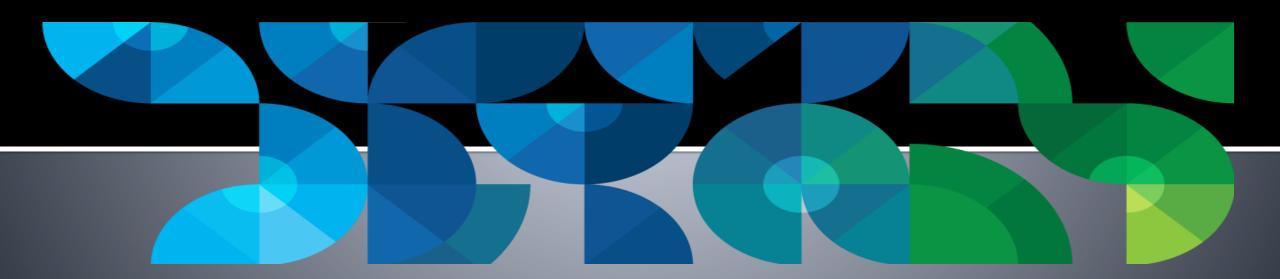
Summary CDU Features

Alt Comm Outbound Proxy Support

(https://watsonsupplychain.ideas.ibm.com/ideas/CONDIRECT-I-335)

Session Stickiness Improvement

(https://watsonsupplychain.ideas.ibm.com/ideas/CONDIRECT-I-309)



CONDIRECT-I-335: Making alternate communication paths retriable for a target node with proxy in middle of the connection.

Request from customer:

- CD/U when communicating via proxy and target CD node not being reachable via primary path, CD/U errored out and connection to target CD node not retried by CD/U via alt.comm.outbound path(s).
- Hence, customer requested to make these errors/message ids retriable in cases where the connection between two nodes includes a proxy in middle and alt.comm path(s) is configured.

Error Cases:

Proxy (like xinetd) that results:

Message Id => XIPT009I

Short Text => TCP lost SYNC. System error is Success.

With HA Proxy:

Message Id => XIPT016I

Short Text => TCP lost the connection. System error is Broken pipe.

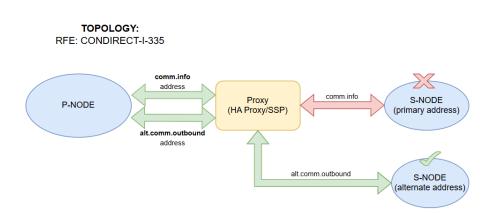
With SSP:

Message Id => XSMG622I

Short Text => An exception response was received during process exec.

Enhancement:

 As part of the proposed enhancement, we will introduce a new behavior for handling the list of errors aka. message ids retriable when Proxy is in the middle of a connection.





CONDIRECT-I-335: New Netmap configuration parameters (1/2)

We are introducing two new netmap parameters,

- alt.comm.outb.proxy = Y|N, y|n
- alt.comm.outb.proxy.msgids = (XIPT009I,XIPT016I,XSMG622I)

which enables the system to treat the CD/U(session manager) initial session failure with above message ids (default) as retriable error, using an alternate communication path.

Parameter Details:

- Default Value: The default setting for the alt.comm.outb.proxy parameter is 'N' or 'n' and alt.comm.outb.proxy.msgids parameter is XIPT009I,XIPT016I,XSMG622I (list of retriable errors).
- Enabled Value: If you wish to enable this functionality, set the alt.comm.outb.proxy parameter to 'Y' or 'y'.
- Conditions for Enabling this Functionality:



CONDIRECT-I-335: New Netmap configuration parameters (2/2)

When alt.comm.outb.proxy is set to 'Y' or 'y', the following conditions must be met to ensure proper operation:

- 1. **Proxy in the Middle of the Connection:** The communication process must involve a Proxy located in the middle of the connection. This ensures that the system can detect the error condition and handle it through alternate communication mechanisms.
- 2. Alternate Communication Path defined in the Netmap Configuration: There must be an alternate communication path defined in the netmap configuration. This alternate path will be used if the primary communication fails.

NOTE: If customer wish to add new error message id to the "alt.comm.outb.proxy.msgids" list to enable the retry for that error other than default list then please consult it first with the CD/U L3 team via support ticket.



CONDIRECT-I-335: New Behavior when Proxy is in middle of the connection

- When alt.comm.outb.proxy is set to 'Y' or 'y', the system will automatically attempt to retry session establishment using the alternate path when it encounters the failure with message ids XIPT009I, XIPT016I or XSMG622I (as default).
- The ability to retry the list of message ids using an alternate communication path is contingent on the presence of such a path in the netmap configuration.
- If the *Proxy is not involved* (alt.comm.outb.proxy is set to 'N' or 'n') in the connection (i.e., it's not between the source and target nodes during communication), the list of message ids will not be retried using an alternate communication path.



CONDIRECT-I-309: Session Stickiness Improvement.

Request from customer:

- There is a limitation/issue with CD/U process that in the middle of file transfer client brought down the connect:direct snode in primary server and brought up in the secondary. Since the process was interrupted after a successful connection to the primary server, pnode keeps retrying the primary server (as currently documented for alt.comm.outbound). It is not retrying to alternate IP.
- Hence, customer requested for an option that results in behavior where the process will try primary first and then retry for alternate IP address.

Enhancement:

- As part of the proposed enhancement, we will add a new parameter to netmap configuration: alt.comm.outbound.sticky = Y|N, y|n
- The new parameter will default to 'Y' or 'y', which is the current behavior.
- When alt.comm.outbound.sticky = 'N' or 'n' then on restart, an interrupted session will cycle through the comm.info and alt.comm.outbound entries, just as it did for the initial connection attempt. It won't stick to the previously established session in case the session is interrupted and restarted. It will be done automatically and no need for a manual intervention to get processes restarted.



THANK YOU!!!

