## **Network Configuration**

This part of configuration concerns the internal communication of the nodes in the ClusterReplica Structure. If all default values are to be used, no configuration is needed for this part. However, if any value is changed on the Primary Master station, the same must be done on all Replica Member (s).

M Primary Master - XLink Cluster	eplica Enterpise	
SetUp Log Yew Help Exit		
Primary (THESQL)	Item Name Connection Status Connection Status Communication Setup	
Quick Start for New Users		
- 🖸 Replica Member Setup		
🗷 🎧 Replication Set Configuration		
High Availability Configuration		
E 🔐 Network Configuration		
Connection Status		
Communication Setup		
6		
	•	Þ
For Help, press F1	📲 Local Cluster Type: Primary	Replication //

The two parts in this configuration section are:

- 1. Connection Status for users to check on the connection status of the clustering members
- 2. <u>Communication Setup</u> for users to change the default settings for the clustering communications. They include:
  - The Keep alive time
  - The **Communication port**
  - The IP for clustering internal communication

## **Connection Status**

To check connection status in **ClusterReplica Enterprise**, select **Network configuration/Connection Status** as shown in the picture below.

This screen, besides displaying a node's IP and its connection status to the **Master** station, it also shows the role of each machine in the clustering.

- The Primary Master It is the data replication source system and the clustering manager that controls the licensing and configuration of the clustering. It is also the only system that can perform failover.
- A Repli-Master It is a data replication source server that needs to replicate the data files on it to other servers in local or remote locations. While functioning mainly as the data replication source, a repli-master can also be used as a replica member to receive data from other master servers. It is different from the Primary master in the way that it does not have the management power on the clustering.

- A Replica Member It is a data replication destination system that takes in new data from a Master system for data protection purposes. It can be also configured as a Data Version Management station to allow network end users self manage data files remotely.
- The Secondary station It is a **Replica Member** with an additional role: the failover target. There can be only one Secondary station in a ClusterReplica Structure to pair up with the Primary station for failover.
- 1. This **Primary Master** is in a clustering that has two members: a Repli-Master and a Replica Member, both having healthy connection with the Primary Master.



2. This **Replica Member** is in a clustering that the only other member is the Primary Master. It is to be used for data replication. Notice the connection status showing **Not connected**. This means either the Primary master is failed to function properly or the network connection between the two is broken. A Replica Member will not take up the server role when the failover is not set.



3. This **Secondary Station** is in a clustering that has only one another system - the Primary Master. The Secondary station takes care of both data replication and Failover. Notice a different subnet is used for Failover. Two network cards are installed on each of the Primary and Secondary station for efficiency and data security.



4. This **Repli-Master** is in a clustering that has a Primary Master and a Replica Member. Both Master stations can replicate data to the Replica Member. No Failover is set.



## **Communication Setup**

Communication Setup is part of the Network connection configuration. This part of setup concerns the clustering members communication with each other.

• Detailed explanations comes with each step of the configuration. From the initial panel, click the button **Modify** to bring up the configuration screens.

M Primary Master - XLink ClusterRe	epica Enterpise	
Primary Master	Data Overweiten Mode for Failover Enabled Setup     Allow local data to be overweiten by replication at system restarting time.	
G Replication Set Configuration     G High Availability Configuration     G Metwork Configuration	- Keep Alive Timer Information Keep alive timer: 15 seconds - Communication Port Information	2
Commention Status	Peplication communication port. 3000 Post Scanner	2
in l	Private communication address pair is reserved for internal communication and replication primary to recording retrieve. Unding retrievel, adapter: Realistic RTLB139 Family PCI Fast Ethernet NIC #2	Property
For Help, press P1	Local private communication address: 156 1.2 100 10     (member IP address)     (member IP address)     (member IV address)	Pro v

• Step 1 - the Keep alive time is the time duration that the Secondary replica station checks on the Primary master for being alive. If no response is confirm at a checkup, the Secondary station will kick off Failover to make itself the Primary master and continue its services.

Step 1: Cluster Private Communication P	ort & Keep Alive Timer Setup
	Step 1: Cluster Private Communication Port & Keep Alive Timer Keep alive time is used by ClusterReplics to track the availability of the other nodes in the cluster. If no responses are received within the keep-alive time frame, local system will become standalone node in the cluster. Exister private communication port is used by ClusterReplice software to maintain communication and data integrity on both primary and secondary systems. If communication port is being used by other applications on either of the clustered system, it has to be changed for ClusterReplice to function propely. Cluster private communication port has to be the same on both primary and secondary system. You can click on Part Scanner' button to find out if the specified port is being used by any application.
	Keep alive timer: [5 second(s)
	Communication Port: 3000 Default
	Port Scanner
	<bods next=""> Cancel</bods>

Both values can be changed according to your system environment and practical needs.

• Step 2 - this step allows you to define the Netword card and IP used for the clustering internal communication. During normal operation, this IP is to be used for data replication and other communications between the clustering systems. It is recommended that a separate network card with different IP subnet is used for the internal communication from the **cluster IP** which is to be used for public connection to the server.

Step 2: Cluster Private Communication	Addresses Setup		×
	Step 2: Cluster Private Communication Cluster private communication address is used by Clust maintain communication and data integrity on both prin systems. If multiple network cards exist on cluster system, you n network, card binds the specified address. You can click on 'Ping' button to test if the specified ad	n Addresses effepica software to any and secondary eed to specify which sidess is reachabled.	
	Select binding network card Restek RTL602545Hosed Ethemet Adapter (C ) Local communication address: 196 , 12 , 100 , 10 Brows	Property e Ping.	_
	< <u>B</u> ack <u>N</u> ex	Cancel	

• **The Summary** - this screen shows the summary of the configuration for the **Communication Setup**. You can go back to make changes if you have changed your mind on any of the items set earlier. If all looks right, click **Finish** to complete the setup.

