

The Control View

Control View Summary

NL2 monitoring consists of various ICMP and LDM pings, and LDM data flow checks

between the servers. Automated switching decision based on processor and application availability is performed once every 60

seconds. If the server acting as the aggregator goes down, fails, or stops

sending LDM data to the secondary processor in the cluster, the system will automatically promote the secondary server to primary and switch the aggregation role to the working processor. The new aggregator will then request LDM data from each radar site and will re-request missing data that was sent during the transition process. Should the aggregating cluster, or network communications to the cluster fail, the secondary cluster will use similar logic to promote itself to primary cluster and then promote the primary server within the cluster to the aggregate role.

If the last LDM data received is older than 3 minutes the Data Time & Date indicator will turn yellow. If the last server status received is older than 3 minutes the Status Collection Time & Date indicator will turn red.

The screenshot displays a control view interface for two clusters: SILVER SPRING CLUSTER and ROC CLUSTER. Each cluster has four LDM (Local Data Manager) units (LDM 1-4). The interface shows various status indicators for each LDM unit, including Role, Aggregate, Status, Locked, LDM, Data Date, Data Time, Status Date, and Status Time. A legend at the bottom of each cluster section defines the indicators: PRIMARY ROLE (green), SECONDARY ROLE (white), AGGREGATE (yellow), ONLINE (green), OFFLINE (red), LOCK (red), and UNLOCK (white). The status collection time is shown as Thu, 16 May 2019 13:29:01 GMT.

SILVER SPRING CLUSTER		ROC CLUSTER	
LDM 1	LDM 2	LDM 3	LDM 4
ROLE: PRIMARY	ROLE: SECONDARY	ROLE: PRIMARY	ROLE: SECONDARY
AGGREGATE: NO	AGGREGATE: NO	AGGREGATE: YES	AGGREGATE: NO
STATUS: ONLINE	STATUS: ONLINE	STATUS: ONLINE	STATUS: ONLINE
LOCKED: NO	LOCKED: NO	LOCKED: NO	LOCKED: NO
LDM: UP	LDM: UP	LDM: UP	LDM: UP
DATA DATE: 05/16/2019	DATA DATE: 05/16/2019	DATA DATE: 05/16/2019	DATA DATE: 05/16/2019
DATA TIME: 13:21:51	DATA TIME: 13:21:18	DATA TIME: 13:27:35	DATA TIME: 13:28:34
STATUS DATE: 05/16/2019	STATUS DATE: 05/16/2019	STATUS DATE: 05/16/2019	STATUS DATE: 05/16/2019
STATUS TIME: 13:29:01	STATUS TIME: 13:28:45	STATUS TIME: 13:29:32	STATUS TIME: 13:28:35

INDICATOR FIELDS

ROLE: (Either **PRIMARY**, **SECONDARY**, or **???**).

1. **PRIMARY** – The currently active server in the cluster. The primary server feeds the cluster's output server (RDS or TDS), and secondary server within the cluster. If the primary is aggregating, it also sends data to the primary in the other cluster.
2. **SECONDARY** – The hot backup in the cluster. It receives data from its cluster's primary server and takes over the primary role if it detects the current primary server is down. The secondary does not feed any other servers.
3. **???** - Server is down, offline, or in an unknown state

AGGREGATE: (Either **YES**, **NO**, or **???**).

1. **YES** - The server designated as the National Level-II aggregation server and is requesting level-II data from each radar. Only 1 of the 4 servers can be the AGGREGATE (although 2 servers could briefly be aggregating while roles are transitioning). Only a Primary node can be designated the AGGREGATE.
2. **NO** – The server is not aggregating.
3. **???** - Server is down, offline, or in an unknown state

LOCKED: (Either **YES**, **NO**, or **???**).

1. YES – The role/aggregation state is fixed and can only be changed manually. The software will not automatically change role/aggregation state regardless of current conditions
2. NO – The role/aggregation state can be changed automatically by the software if conditions warrant.
3. ??? - Server is down, offline, or in an unknown state

STATUS: (Either **ONLINE** or **OFFLINE**).

1. ONLINE – The software detects no problems and operation is normal.
2. OFFLINE – The software has detected a problem and stopped the LDM software.

LDM: (Either **UP**, **DOWN**, or **???**)

1. UP – LDM software is running on server.
2. DOWN – LDM software is not running on server.
3. ??? - Server is down, offline, or in an unknown state

DATA DATE: (MM/DD/YYYY) – Date of the latest LDM product on the server. If the LDM data is more than 3 minutes old, the background turns yellow or (**??/??/????**) Date is in unknown state

DATA TIME: (HH:MM:SS) – Time of the latest LDM product on the server. If the LDM data is more than 3 minutes old, the background turns yellow or (**??:??:??**) Time is in unknown state.

STATUS DATE: (MM/DD/YYYY) – Date of the server's most recent status. If the status is more than 3 minutes old, the background turns red or (**??/??/????**) Date is in unknown state

STATUS TIME: (HH:MM:SS) – Time of the server's most recent status. If the status is more than 3 minutes old, the background turns red. or (**??:??:??**) Time is in unknown state

Status Collection Time: (DDD:dd:mmm:yyyy:HH:MM:SS) – Time of the Web server's most recent NL2 status update. If the data status has not updated in the last 5 update intervals, the text turns red.