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# Cluster a Multi-Node Configuration

Clustering multiple nodes together provides high availability for the IoT\_Primary VM. If Node 1 fails or is rebooting, the VM automatically fails over to Node 2.

You must configure the nodes' numbers before you can cluster them together. Nodes must be configured with numbers only if they will be clustered. Before configuring a node with a number and clustering it with another node, it must be set up through the VS-Settings Menu (see [Configure Your System's Settings](#)).

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## Basic Operations

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## Setting a Node's Number

1. Double-click **VS-Settings** to open the VS-Settings Menu.



2. In the VS-Settings Menu, enter **2**, then press **Enter** to open the Clustering Menu.

```
*** VS-Settings Menu ***
0) Setup Wizard           - A guided setup of the system.
1) Manage VMs Menu      >>> - Menu for virtual machines related tasks.
2) Clustering Menu      >>> - Menu for clustering related tasks.
3) Advanced Menu        >>> - Menu for advanced tasks.
4) Service Tasks Menu   >>> - Menu for service related tasks.
Your Choice ('q' to Exit this Menu): 2
```

3. To establish Node 1, enter **1** in the Cluster Tasks Menu; to establish Node 2, enter **2**; then press **Enter**.

```
*** Cluster Tasks Menu ***
0) Display node info      - Display current node information
1) Make Node 1           - Make node the primary cluster node.
2) Make Node 2           - Make node the secondary cluster node.
3) Add Node to cluster   - Add a new node to the cluster.
4) Cluster Status        - Display status of the cluster.
5) Clear node number     - Revert a node number setting on a node
Your Choice ('q' to Exit this Menu): 1
```

4. A confirmation message displays:

- If you are creating Node 1, a confirmation message informs you that the VM on the Node 1 will be preserved after the cluster is created.
- If you are creating Node 2, a confirmation message informs you that you will be unable to create VMs on Node 2.

Type **y**, then press **Enter** to continue configuring the node's number.

```
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1) Make Node 1           - Make node the primary cluster node.
2) Make Node 2           - Make node the secondary cluster node.
3) Add Node to cluster   - Add a new node to the cluster.
4) Cluster Status        - Display status of the cluster.
5) Clear node number     - Revert a node number setting on a node
Your Choice ('q' to Exit this Menu): 1
Any VMs that exist on node 1 at the time it is joined to the cluster will
be preserved after the cluster is created.
Continue with node number change (y/n)? y
```

The system indicates when it successfully set the node, then returns to the Cluster Tasks Menu.

```
Your Choice ('q' to Exit this Menu): 1
Any VMs that exist on node 1 at the time it is joined to the cluster will
be preserved after the cluster is created.
Continue with node number change (y/n)? y
Configuring cluster node..please wait
Successfully set the node number to 1
*** Cluster Tasks Menu ***
0) Display node info      - Display current node information
1) Make Node 1           - Make node the primary cluster node.
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Your Choice ('q' to Exit this Menu):
```

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