

## Multiple-Site SymNet Systems — Divide and Conquer

SymNet systems that contain more than one Ethernet equipped DSP are most easily programmed and managed from one SymNet Designer site file. In some instances it may be beneficial to break apart larger systems into smaller multiple-site systems. This can be achieved with the same control network and CobraNet network connections between hardware.

This tech tip will highlight scenarios where partitioning can be useful, as well as a high-level overview of how to properly configure a partitioned system so that network communication is not compromised.

### Scenarios where a multiple site system may be beneficial:

- Multi-phase installation projects where different sections of a facility will be completed at different stages.
- Facilities containing multiple rack rooms separated either by distance or functionality.
- Multi-zone systems that require independence from one another for the purposes of maintenance, updating, troubleshooting, and/or localizing downtime.
- Systems that require varying security levels for certain sections.

### Disadvantages of partitioning a system:

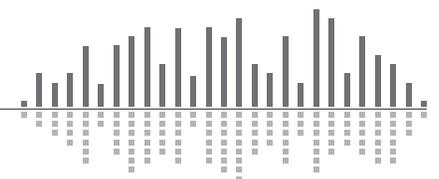
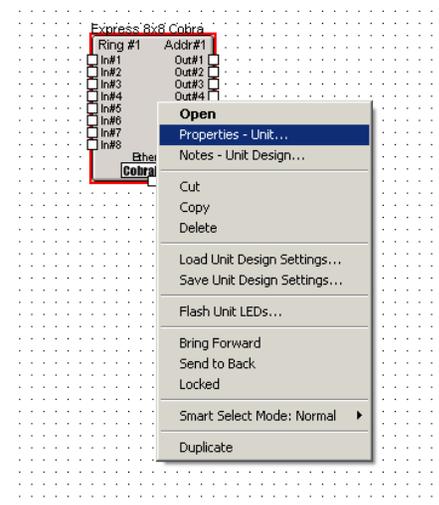
- Programming will be separated into multiple SymNet Designer site files. Initial programming, though, can be completed in one site file and components can later be cut and pasted into separate files for the partitioning. Make special note of the proper Ring ID and IP addresses when transferring components to partitioned site files.
- Management of the system will need to be from different site files. A work-around is to use SymVue for control. Individual sites can all be controlled from one SymVue screen, though note that SymVue is a control app only and no programming changes can be made from SymVue.

### Configuring a multiple site system:

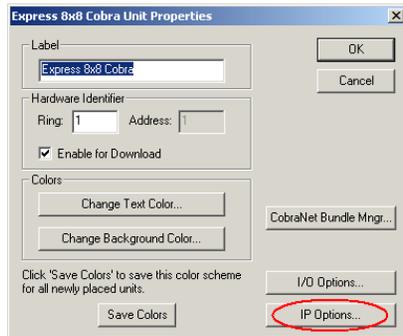
A multiple site system will result in having hardware with duplicate Ring numbers connected to the same CobraNet and RS-232/485 networks, respectively. This will cause communication and control conflicts. To handle this scenario, SymNet Designer has a feature called Site Identifier. Specifying a Site Identifier will ensure that CobraNet and RS-232/485 data on the network is routed to the intended device. **Each unit within a given site will need to have the same Site Identifier number; and each site must have a unique number from the other sites on the network.**

### To set the Site Identifier:

- 1) In the Designer software, right-click on your hardware module and choose Properties.



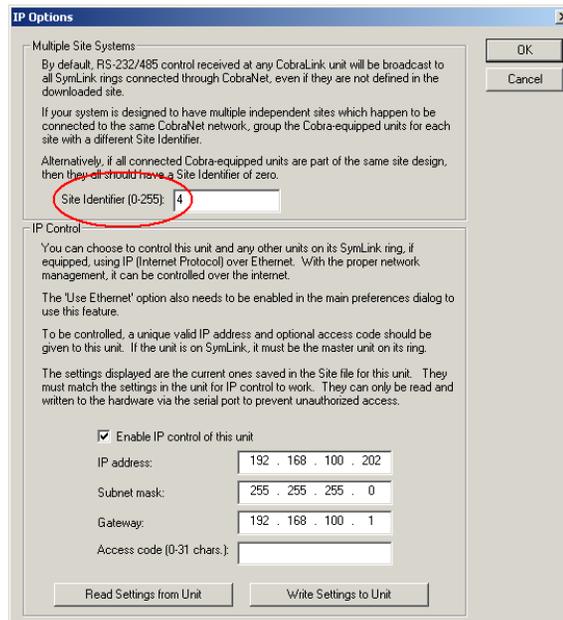
2) Click IP Options.



3) Enter a unique Site Identifier for this site file and click Write Settings to Unit.

4) Repeat for any other units in this site. Then repeat for other sites, using a different number.

If done properly, you can now have up to 256 independently managed SymNet systems all connected to the same networks, and freely passing audio between devices via CobraNet.



## Summary:

Multi-box SymNet systems connected by CobraNet can be partitioned into smaller groups and managed separately while maintaining full functionality. Scenarios where this may be beneficial include multi-staged installation projects, systems that require independence for maintenance, or systems that require varying security privileges. Partitioning a system and maintaining discrete control of each site is achieved by specifying Site Identifiers unique between sites, but common to each DSP within one site. For additional information or help on the subject contact [support@symetrix.co](mailto:support@symetrix.co).

