Applied Systems Engineering, Inc.

1671 Dell Avenue, Suite 200
Campbell, CA 95008, USA
Tel: 408-364-0500
Fax: 408-364-0550
www.ase-systems.com

Using the Point List View
Technical Note

The process of entering RTU unique information for proper display of RTU values and for defining point database information such as point names, scale factors, etc. involves several steps. Once entered, the information can be saved to a file(s) for retrieval at a later time. There are actually two files involved in the storage of this information:

- MON file – Normally, one MON file is created for each RTU. The MON files contain information such as RTU ID, Group numbers, RTU point configuration, and various communication parameter values. MON files are created from the File>Save As… menu option. These files can be stored and retrieved from any folder. Normally, the last MON file used will be loaded by default the next time the test set is started. A different MON file can be loaded using the File>Open menu option.

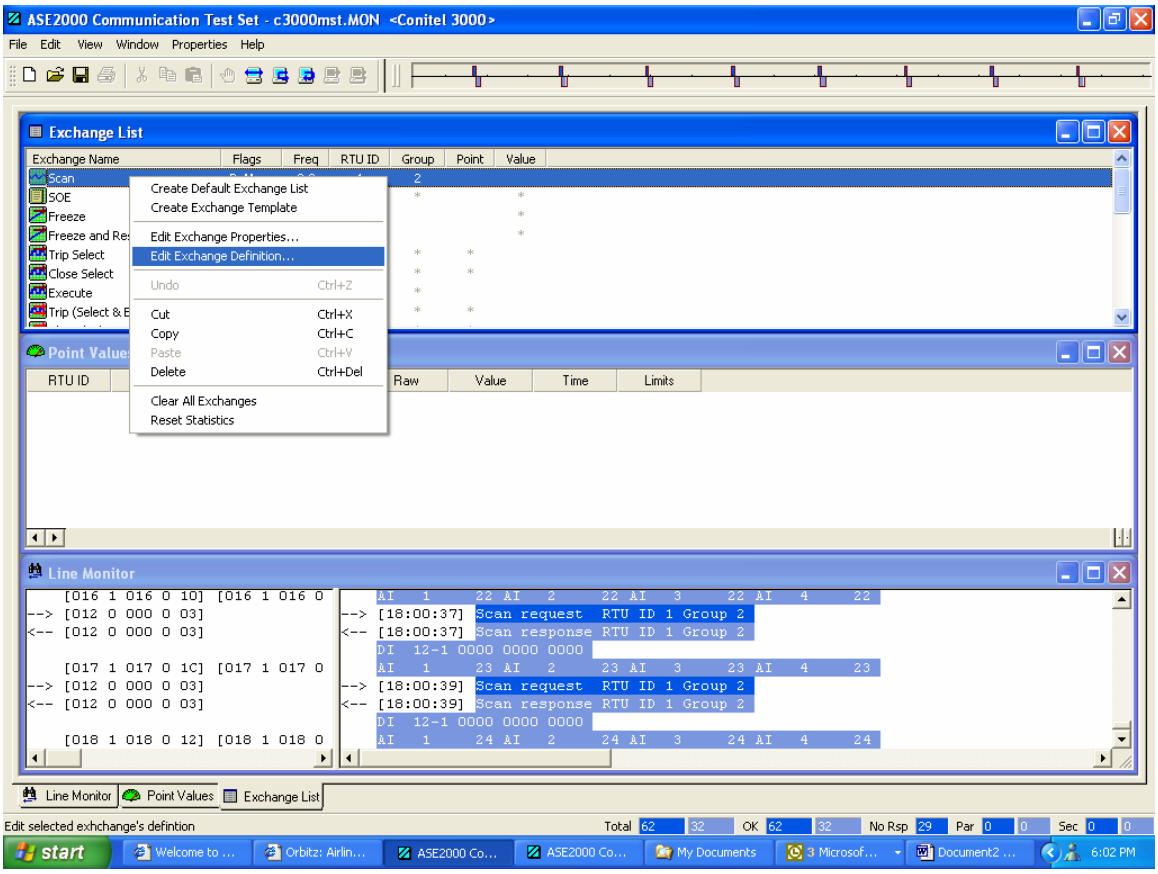
- MDB file – This is the database file and there is only one of these files per test set, "pointlist.mdb". This file is created during ASE2000 test set installation and is located in the test set directory: *C:\Program Files\ASE\ASE2000 Communication Test Set\pointlist.mdb.* All data entered through the Point Values View and associated menus is stored in this file. Unlike the MON files, there is a single MDB file for the system. Data for all RTUs is stored in this single file.

The following procedure illustrates the steps used to:

1. Modify an exchange definition to define the point types and point count for each point type returned in an RTU Scan request. This is necessary for certain protocols such as Conitel 3000 so the test set will know how to display the values. In this example, both digital and analog points are returned in the same scan. Normally, the points would be returned in different scans (different scan groups) which would require the set-up of two or more Scan exchanges with the appropriate point configurations.

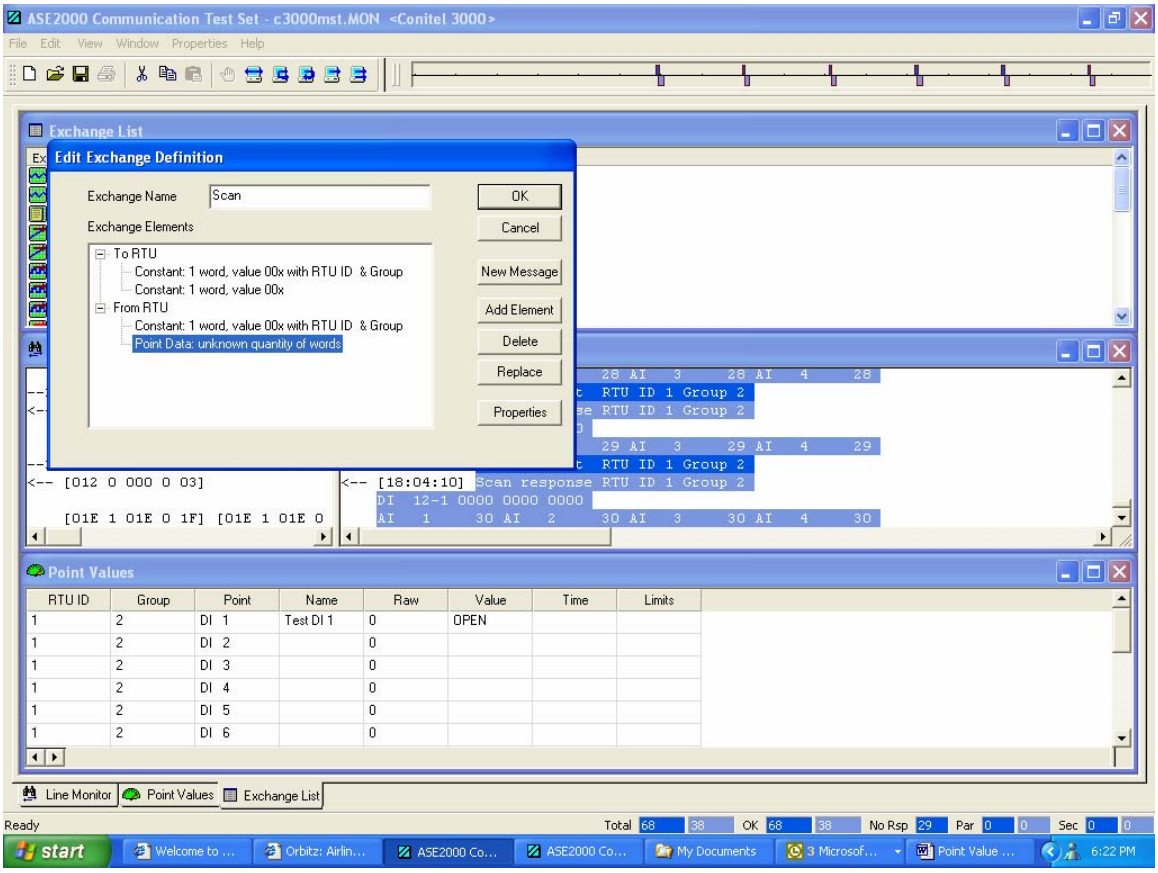
2. Define entries in the database used by the Point Values View. Please note, it is important to define the message content for each scan response so the Point Values View will know how to display the message values.

With the test set active, set up the screen views as follows (Exchange List, Point Values, Line Monitor):

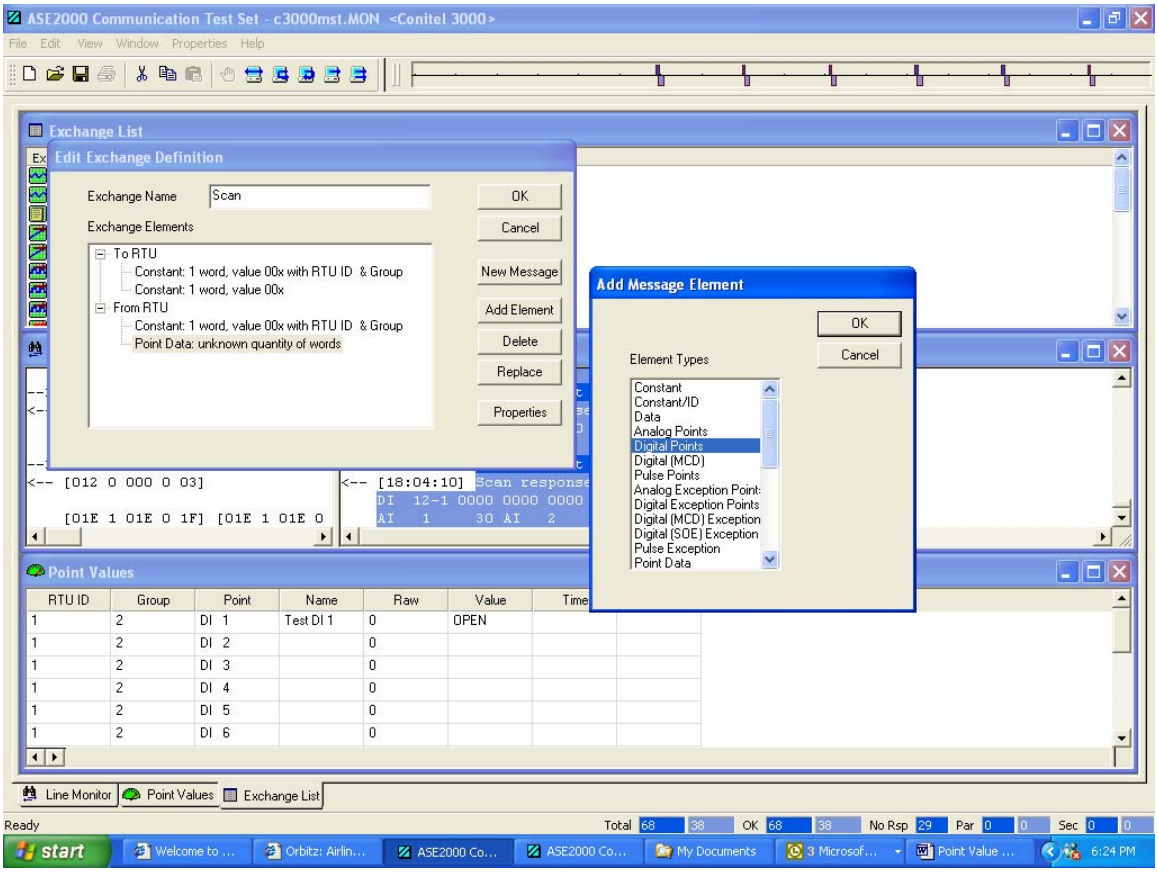


1. Make Exchange List the active view (click anywhere in the view)
2. Right click on the Scan exchange name
3. Select Edit Exchange Definition

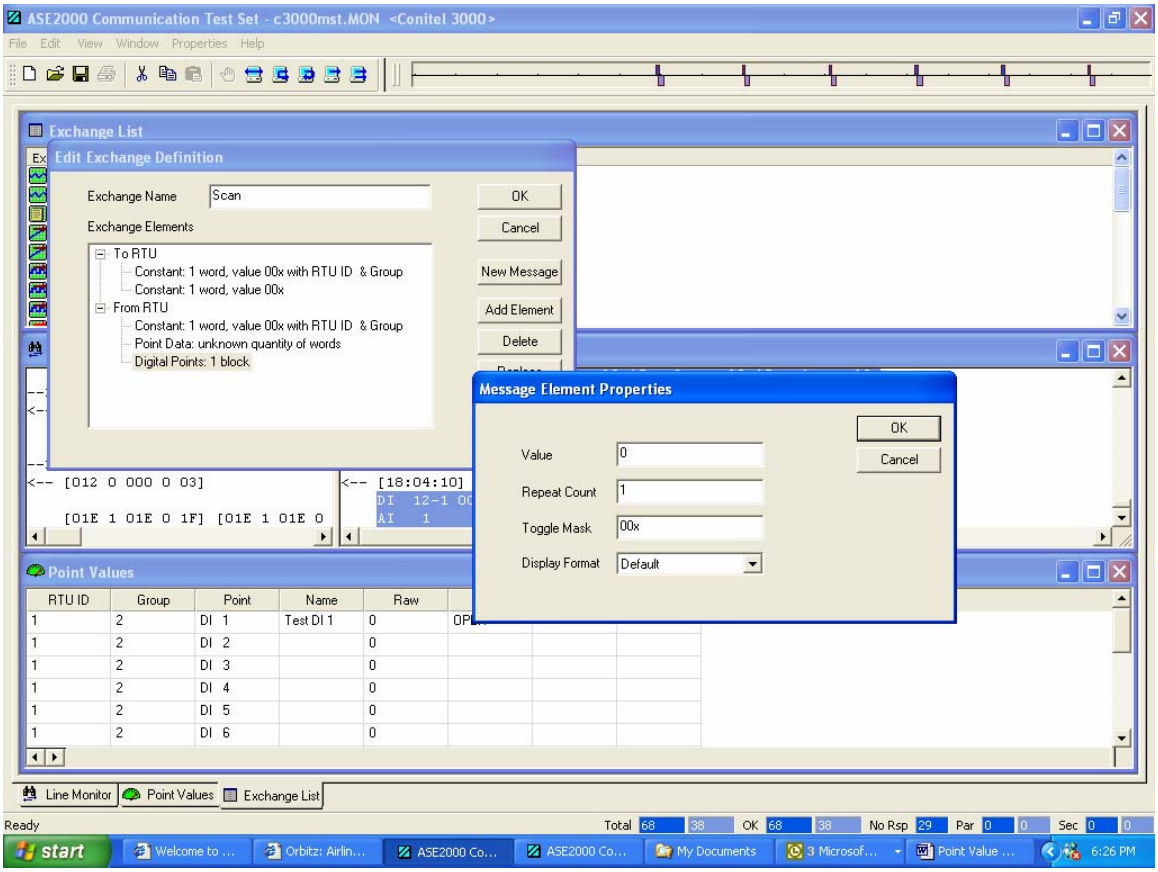
The next step is to define the message contents (point configuration) for the RTU. In the following example, the RTU will return 1 block of Digital points (12 points) and 4 analog points in the same Scan request.



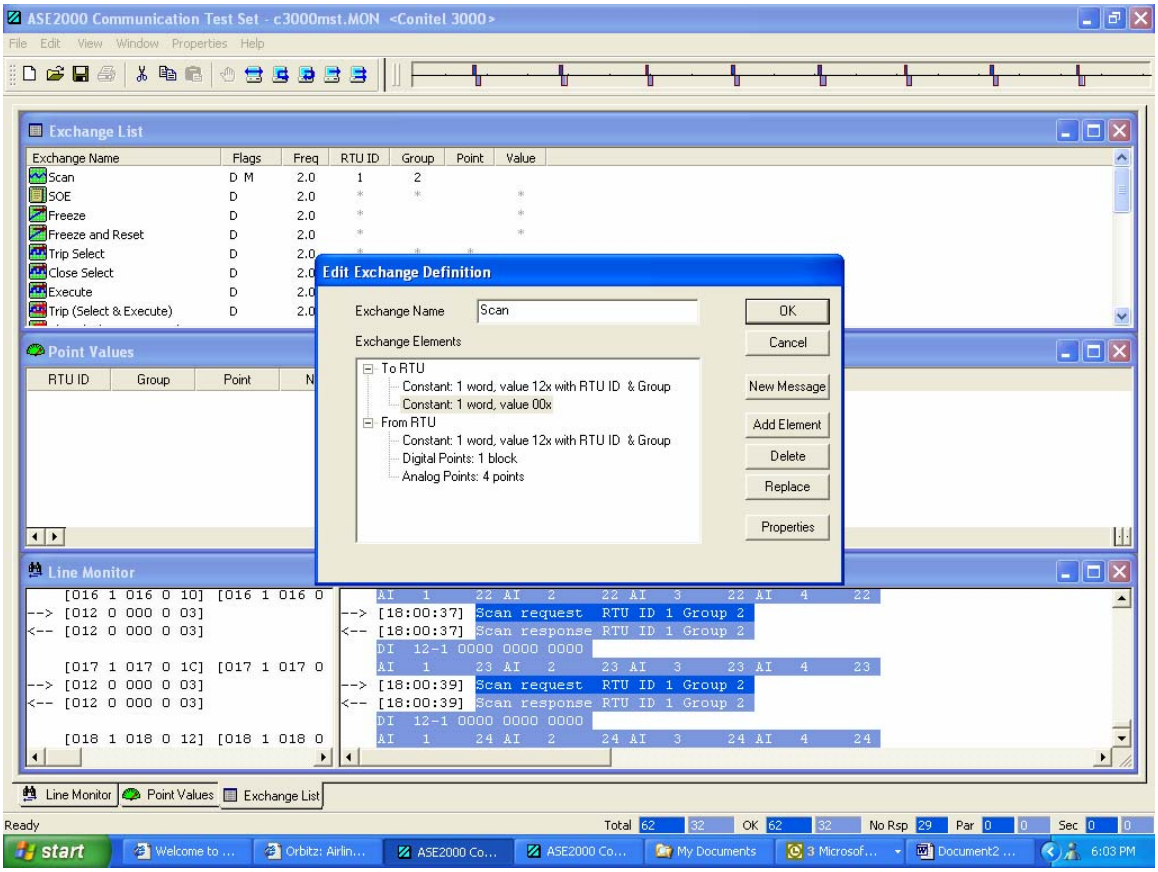
1. Select the last entry “Point Data: unknown quantity of words” then select Replace.



2. Select Digital Points and click OK



3. The Repeat Count is set to the number of 12-bit blocks of digital points returned in the scan. In this case, the count is 1.



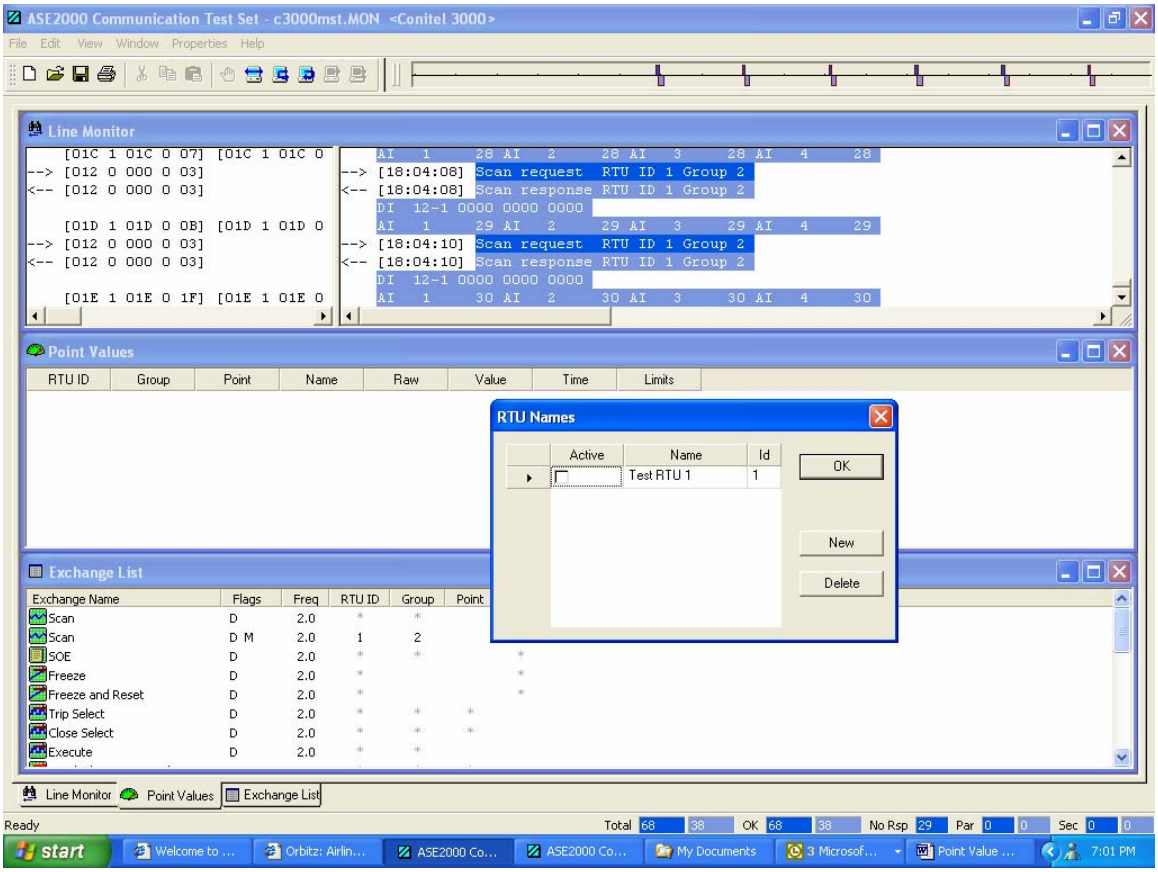
4. Select Add Element and add the definition for 4 analog points.

At this point, the scan command has enough information to properly display the values returned in a scan response.

Create a MON file to save the information entered up to this point.

- Select File>Save As… and enter a file name

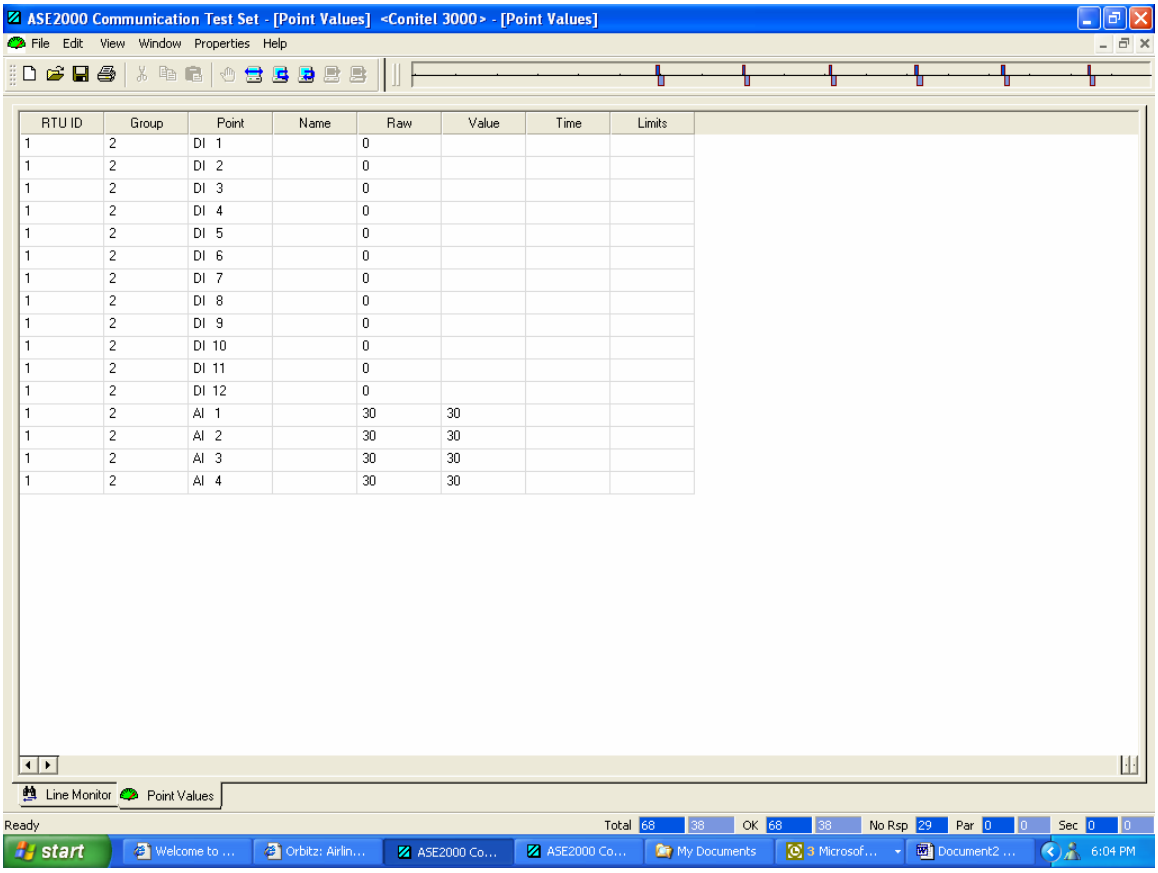
At his point, we are ready to start configuration of the Point Value view.



1. Make Point Values the active view
2. Select Edit>Define/Activate RTU
3. Select New
4. Enter the RTU name
5. Enter the RTU ID (address)
6. Select the Active check-box
7. Select OK

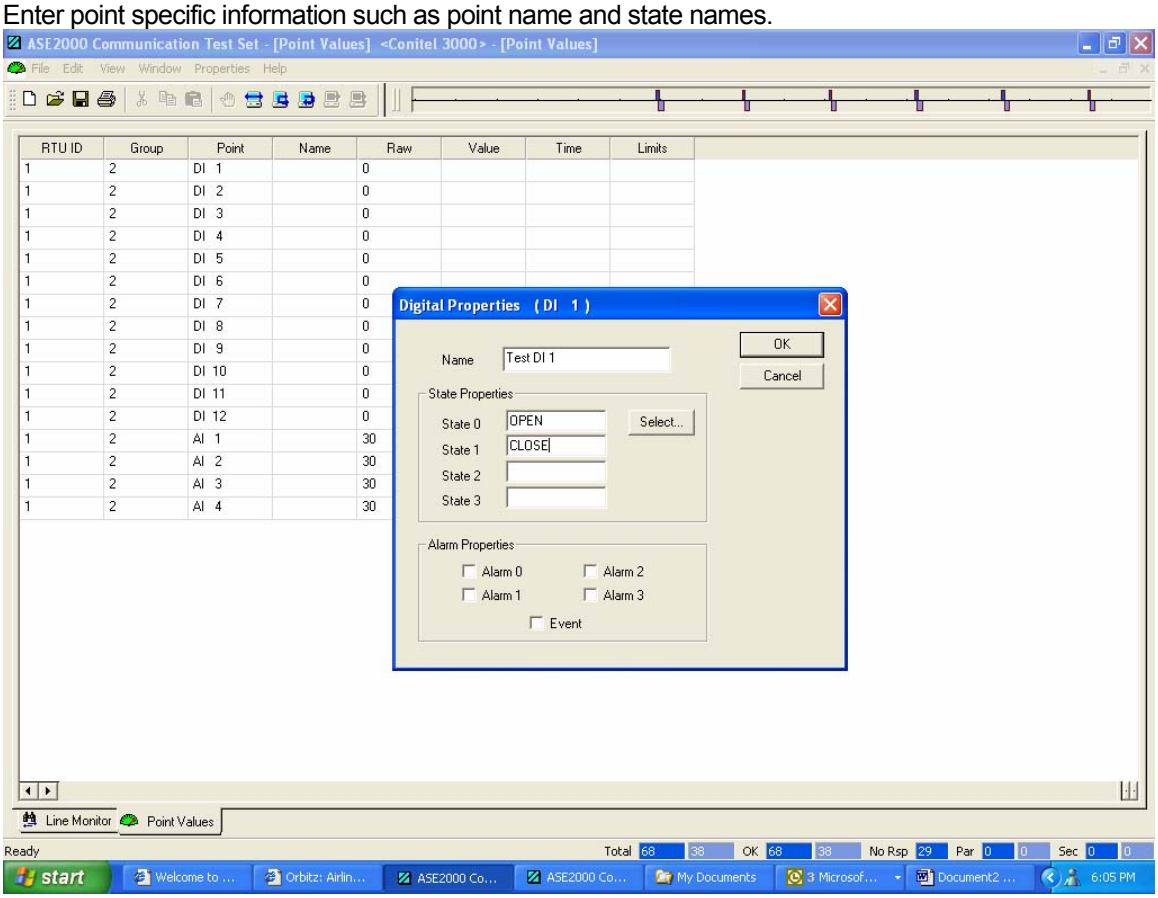
NOTE: It will be necessary to define and activate an RTU entry for each RTU that you wish to save point information for. If you enter point information on the Point Value View without first defining and activating and RTU entity, the point information will not be saved.

Now we can acquire RTU data which will provide initial values for the database.



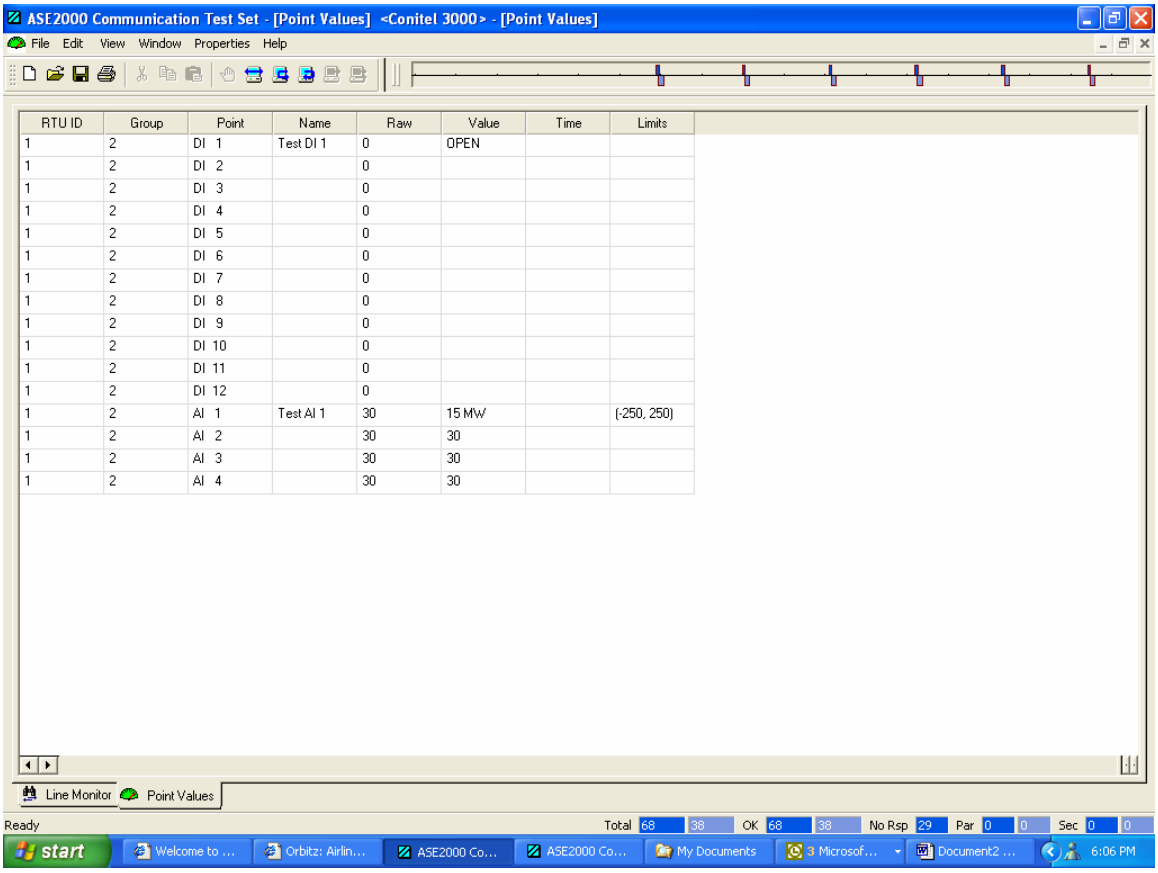
1. Select Monitor or Simulate Master, as appropriate, to acquire scan data
2. The data will appear in tabular format on the Point Values View.

Enter point specific information such as point name and state names.



1. Double-click on the line for the point to be edited.
2. Enter the appropriate information and select OK

Repeat this procedure for all the points until the database definition is complete



It is not necessary to perform “Save” operations when entering information on the Point Values View. The information is written to the “pointlist.mdb” file as soon as it is entered.

To transfer the database information to another computer, it is necessary to move both the MON files and the pointlist.mdb file.

Since there will already be a pointlist.mdb file on the new computer, the “populated” pointlist.mdb file will replace the existing file. The MON files will probably have unique names so they won’t conflict with other files. The MON files can be stored anywhere on the new computer.