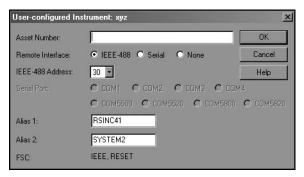# FLUKE®

Using the "Address Alias" in MET/CAL® Procedures

Overview:

Two useful fields are often overlooked when configuring an instrument in either the "Run Time" or "Editor" Applications.

The "Alias 1" and "Alias 2" fields can be used for System Instruments and User-Configured Standards.

Note that in the configuration of System Instruments, the default setting of "Alias 1" is the instrument model number and "Alias 2" is left blank. But in this model of the instrument at address 30, both fields are being used.

What is the intent of the "Alias" fields?
Configuration of the "Alias" field gives the procedure writer the option to call an instrument into the procedure without hard-coding a specific address.

When are they used?
They are used in conjunction with the "IEEE," "PORT" or "RESET" FSC.

Here are some examples based on the instrument configuration screen shown above:
IEEE [@30]*IDN?

This calls at IEEE address 30
IEEE [@RSINC41]*IDN?

This calls the same instrument at "Alias 1"
IEEE [@SYSTEM2]*IDN?

This calls the instrument at "Alias2"
It is important to use a descriptive alias (up to the 7-character limit).

Here is an example:
IEEE [SCPIDMM]*IDN?
The alias, "SCPIDMM" describes a user-configured DMM that conforms to SCPI programming syntax.

Why is use of an alias preferred over address hard-coding?

1. **Traceability —** Aliasing is simply assigning a name to an instrument at an address. This is done by configuring the instrument in MET/CAL. Because the alias is part of the instrument configuration, the following statements apply:

   a. MET/CAL requires that all configured instruments, whether user-defined or system instruments are in the database.
   b. Configured instruments must have a current calibration record (or a "NO CAL" designation).
   c. Configured instrument requirements will display in the **Required Instrument** dialog box, so the operator will see the requirement at the beginning of the procedure (another good reason for descriptive alias names).
   d. The real instrument, not the alias, will be recorded in the standards used table in the database as part of the cal event for the respective unit under test, as well as all post-calibration documentation that lists standards used.

   At the procedure level, a call to an address is simply that. The procedure has no way of recognizing that the instrument at that address is a required instrument. The instrument at that address does not have to be in the database or have a current calibration record. Since it is not seen by the program as a required instrument, the operator will not be prompted for the instrument at the beginning of the procedure and none of the post-run documentation or the database will list the instrument as a standard used.

2. **Portability —** If there is more than one instrument that fits the requirement of a procedure hard-coding can be clumsy. Different instruments generally use unique IEEE addresses. If hard-coding is done in the procedure, the operator will have to double-check the address of instrument being used and change it either at the instrument level or the procedure level before proceeding. This is not practical and can lead to errors. In this same situation, an alias can be used in the procedure. Leaving the asset number field blank in the instrument configuration allows the use of more than one instrument of the same type. When running the procedure, the operator will be prompted to enter the asset number of the instrument being used at that alias. MET/CAL will properly call the standard whose asset number has been entered.

3. **Readability —** IEEE[@5520] is easier to understand than IEEE[@09], because of the use of descriptive alias names.

Summary

Use of Alias names in MET/CAL procedure writing is the easy alternative that helps to ensure **traceability, portability and readability**.

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