

License Management for MVS Sites

Information Builders has a license management facility, which is a mechanism that registers your copy of FOCUS with Information Builders.

This facility checks that your site has registered its site code and CPU ID when installing FOCUS. If either one has not been installed, an appropriate warning or violation message is displayed every time a user enters FOCUS.

Note: At no time is FOCUS disabled because of the license management facility.

Overview

The license management facility is actually a processor and site code registration facility:

- **Processor registration.** The instructions for installing the CPU ID are contained in this tech memo. Information Builders takes the CPU ID and generates an encrypted registration ID.
 - If your processor has not been registered, a warning message is displayed at FOCUS initialization.
 - If your copy of FOCUS is registered and then run on a processor other than the one on which FOCUS was registered, or if any error occurred during processor registration, a violation message is displayed.

In order to generate a CPU registration ID, Information Builders needs the following information:

- CPU serial number (four digits) and model number (six digits in FOCUS 7.0.9 or higher, including the version number. Four digits in prior releases).
- Maximum number of processors on your system.
- **Site code registration.** The instructions for installing the site code are documented in the *OS/390 and MVS Installation Guide*. If your site code has not been registered, or if any error occurred during site code registration, a violation message is displayed at FOCUS initialization.

How to learn the CPU ID

If FOCUS 7.0.8 or above is installed, issue the following command from the FOCUS prompt:

```
? CPUID
```

Which displays the following information. Note that the version portion of the CPU ID in the following illustration displays only in FOCUS 7.0.9 and above:

```
OBSERVED CPU:
***** Processor mmmm Model nnnn-vv Max pp Site ssss.ss
LICENSED CPU(S)
***** NONE
```

Where:

mmmm	is the Processor ID.
nnnn	is the model number.
vv	is the version. Provided in FOCUS 7.0.9 and above.
pp	is the number of processors in the box.
sss.ss	is the site code.

If FOCUS Version 7.0.8 or above is not installed, the CPU information can be obtained from the operator console by issuing the following MVS operator command:

```
D M=CPU
```

Which displays the following information:

```
IEE174I 12.16.10 DISPLAY M 218
PROCESSOR STATUS
ID CPU SERIAL
1 + 1115379121
2 + 2115379121
3 + 3115379121
4 + 4115379121
```

The CPU ID and model are identified by the right-most eight digits.

Note that this command does not provide the version number. To obtain the version number, you must:

1. Install FOCUS 7.0.9 or above.
2. Start FOCUS.
3. From the FOCUS prompt, issue:

```
? cpuid
```

Installation Instructions

1. Issue the appropriate command to learn the CPU ID.
2. Call Information Builders Customer Support Service (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available between 8:00 a.m. and 8:00 p.m. EST.
3. Give the CPU ID information for all CPUs to the Customer Support Consultant. They will provide you with the registration ID for each CPU.
4. Apply the ZAP. (See next section).

Apply the ZAP

This is done with the standard MVS AMASPZAP utility. It is applied to the section LIST in module IBICPUID. The list can contain up to 128 CPU registration IDs. Each CPU registration ID value must be zapped instead of zeroes at offsets X'10' for the first ID, X'20' for the second, X'30' for the third, etc.

The MVS JCL example follows:

```
//... your job card here
//...
//*****
//*
//*          FOCUS Processor ID Registration
//*
//*****
//*
//*  Usage: 1. Issue D M=CPU from the operator console
//*          or the ? CPUID from within FOCUS Release 7.0.8
//*          on all processors where FOCUS is licensed.
//*
//*          2. Contact IBI, communicate this information, and receive
//*             one encrypted string for each processor.
//*
//*          3. Put these encrypted strings in member REGCPUIN in
//*             FOCCTL.DATA starting at offset x'10' for the first id,
//*             x'20' for the second id, and so on for up to
//*             128 processor ids.
//*
//*          4. Insert a job card here and specify high-level
//*             qualifiers for SYSLIN and SYSIN datasets.
//*
//*          5. Submit this job.
//*
//*
//*****
//IBIZAP   EXEC  PGM=AMASPZAP,PARM=IGNIDRFULL
//SYSPRINT DD   SYSOUT=A
//SYSLIB   DD   DSN=prefix.FOCLIB.LOAD,DISP=SHR
//SYSIN    DD   DSN=prefix.FOCCTL.DATA(REGCPUIN),DISP=SHR
```

License Management for MVS Sites

An example of REGCPUIN

```
* This file contains input for REGCPUID.  
* It may contain up to 128 encrypted processor ids.  
* Contact IBI to receive encrypted strings for the REP statements.  
NAME IBICPUID LIST  
REP 10 83832202B0  
REP 20 0B030205B0
```

Warning Message

If the CPU ID is not implemented for your site, the following message displays at the beginning of all FOCUS user sessions. Note that the version portion of the CPU ID in the following illustration displays only in FOCUS 7.0.9 and above:

```
FOCUS 7.2.0 01/08/2002 13.39.43 27.02  
*****  
* WARNING : *  
* THIS COPY OF FOCUS IS NOT YET REGISTERED. PLEASE CONTACT IBI. *  
* "EX READMEF" FOR COMPLETE DETAILS. *  
*****  
OBSERVED CPU:  
***** Processor mmmm Model nnnn-vv Max pp Site ssss.ss  
LICENSED CPU(S):  
***** NONE  
>
```

Where:	mmm	is the Processor ID.
	nnn	is the model number.
	vv	is the version. Provided in FOCUS 7.0.9 and above.
	pp	is the number of processors in the box.
	sss.ss	is the site code.

Violation Messages

If the CPU ID is registered for a copy of FOCUS and it is run on another processor, the following message displays at initialization. This message also displays if there was an error in the license management facility installation procedure. Note that the version portion of the CPU ID in the following illustration displays only in FOCUS 7.0.9 and above:

```
FOCUS 7.2.0 01/08/2002 13.39.43 27.02
*****
* VIOLATION: *
* THIS COPY OF FOCUS IS RUNNING ON AN UNLICENSED CPU. PLEASE CONTACT IBI. *
* "EX READMEF" FOR COMPLETE DETAILS. *
*****
OBSERVED CPU:
***** Processor mmmm Model nnnn-vv Max pp Site ssss.ss
LICENSED CPU(S):
***** Processor mmmm Model nnnn-vv Max pp > Registration ID qqqqqqqqqq
>
```

Where:

mmmm	is the Processor ID.
nnnn	is the model number.
vv	is the version. Provided in FOCUS 7.0.9 and above.
pp	is the number of processors in the box.
qqqqqqqqqq	is the encrypted processor ID.

If your site code is not registered, the following message displays at the beginning of all FOCUS user sessions:

```
FOCUS 7.2.0 01/08/2002 13.39.43 27.02
*****
* VIOLATION: *
* THE SITE CODE FOR YOUR COMPANY WAS NOT REGISTERED PROPERLY *
* DURING THE FOCUS INSTALLATION PROCESS. PLEASE CONTACT IBI. *
* "EX READMEF" FOR COMPLETE DETAILS. *
*****
```

License Management for VM Sites

Information Builders has a license management facility, which is a mechanism that registers your copy of FOCUS with Information Builders.

This facility checks that your site has registered its site code and CPU ID when installing FOCUS. If either one has not been installed, an appropriate warning or violation message is displayed every time a user enters FOCUS.

Note: At no time is FOCUS disabled because of the license management facility.

Overview

The license management facility is actually a processor and site code registration facility:

- **Processor registration.** The instructions for installing the CPU ID are contained in this tech memo. Information Builders takes the CPU ID and generates an encrypted registration ID.
 - If your processor has not been registered, a warning message is displayed at FOCUS initialization.
 - If your copy of FOCUS is registered and then run on a processor other than the one on which FOCUS was registered, or if any error occurred during processor registration, a violation message is displayed.

In order to generate a CPU registration ID, Information Builders needs the following information:

- CPU serial number (four digits) and model number (six digits in FOCUS 7.0.9 or higher, including the version number. Four digits in prior releases).
- Maximum number of processors on your system.
- **Site code registration.** The instructions for installing the site code are documented in the *CMS Installation Guide*. If your site code has not been registered, or if any error occurred during site code registration, a violation message is displayed at FOCUS initialization.

How to learn the CPU ID

If FOCUS 7.0.8 or above is installed, issue the following command from the FOCUS prompt:

```
? CPUID
```

Which displays the following information. Note that the version portion of the CPU ID in the following illustration displays only in FOCUS 7.0.9 and above:

```
OBSERVED CPU:
***** Processor mmmm Model nnnn-vv Max pp Site ssss.ss
LICENSED CPU(S)
***** NONE
```

Where:

mmm		is the Processor ID.
nnn		is the model number.
vv		is the version. Provided in FOCUS 7.0.9 and above.
pp		is the number of processors in the box.
sss.ss		is the site code.

If FOCUS 7.0.8 or above is not installed, the CPU information can be obtained from the operator console by issuing the following CP command:

```
CP QUERY CPUID
```

Which displays the following information:

```
CPUID = FF17297390210000
```

The CPU ID and model are identified by the middle eight digits.

Note that this command does not provide the version number. To obtain the version number, you must:

4. Install FOCUS Version 7.0.9 or above.
5. Start FOCUS.
6. From the FOCUS prompt, issue:

```
? cpuid
```

Installation Instructions

1. Issue the appropriate command to learn the CPU ID.
2. Call Information Builders Customer Support Service (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available between 8:00 a.m. and 8:00 p.m. EST.
3. Give the CPU ID information for all CPUs to the Customer Support Consultant who will provide you with the registration ID for each CPU.
4. Apply the ZAP. (See next section).
5. Rerun the COPYFS EXEC which copies the zapped version of FOCLIB LOADLIB to the production disk. Or you can apply the zap first before running the COPYFS EXEC.

Apply the ZAP

This is done with the standard VM ZAP utility. It is applied to the LIST section in IBICPUID MODULE. The list can contain up to 128 CPU registration IDs. Each CPU registration ID value must be zapped instead of zeroes at offsets X'10' for the first ID, X'20' for the second, X'30' for the third, etc. The EXEC example follows:

```
/**  
  
                                FOCUS Processor ID Registration  
  
Usage: 1. Issue CP QUERY CPUID from the operator console  
        or the ? CPUID from within FOCUS Release 7.0.8  
        on all processors where FOCUS is licensed.  
  
        2. Contact IBI, communicate this information, and receive  
        one encrypted string for each processor.  
  
        3. Put these encrypted strings in the file REGCPUIN ZAP  
        starting at offset x'10' for the first id,  
        x'20' for the second id, and so on for up to  
        128 processor ids.  
  
        4. With the FOCUS Maintenance disk accessed R/W as A,  
        from the CMS Ready prompt, run the REGCPUID exec  
  
Output: FOCUS registered for given Processor IDs.  
**/  
trace 'N'  
address 'COMMAND'  
  
'ZAP LOADLIB FOCLIB (INPUT REGCPUIN'  
exit rc
```

An example of REGCPUIN ZAP:

```
* This file contains input for REGCPUID.  
* It may contain up to 128 encrypted processor ids.  
* Contact IBI to receive encrypted strings for the REP statements.  
NAME IBICPUID LIST  
REP 10 83832202B0  
REP 20 0B030205B0
```

Warning Message

If the CPU ID is not registered for your site, the following message displays at the beginning of all FOCUS user sessions. Note that the version portion of the CPU ID in the following illustration displays only in FOCUS 7.0.9 and above:

```
FOCUS 7.2.0 01/08/2002 13.39.43 27.02  
*****  
* WARNING : *  
* THIS COPY OF FOCUS IS NOT YET REGISTERED. PLEASE CONTACT IBI. *  
* "EX READMEF" FOR COMPLETE DETAILS. *  
*****  
OBSERVED CPU:  
***** Processor mmmm Model nnnn-vv Max pp Site ssss.ss  
LICENSED CPU(S):  
***** NONE  
>
```

Where:	mmm	is the Processor ID.
	nnnn	is the model number.
	vv	is the version. Provided in FOCUS 7.0.9 and above.
	pp	is the number of processors in the box.
	sss.ss	is the site code.

Violation Messages

If a CPU ID is registered for a copy of FOCUS and it is run on another processor, the following message displays at initialization. This message also displays if there was an error in the license management facility installation procedure. Note that the version portion of the CPU ID in the following illustration displays only in FOCUS 7.0.9 and above:

```
FOCUS 7.2.0 01/08/2002 13.39.43 27.02
*****
* VIOLATION: *
* THIS COPY OF FOCUS IS RUNNING ON AN UNLICENSED CPU. PLEASE CONTACT IBI. *
* "EX READMEF" FOR COMPLETE DETAILS. *
*****
OBSERVED CPU:
***** Processor mmmm Model nnnn-vv Max pp Site ssss.ss
LICENSED CPU(S):
***** Processor mmmm Model nnnn-vv Max pp > Registration ID qqqqqqqqqq
>
```

Where:

mmmm	is the Processor ID.
nnnn	is the model number.
vv	is the version. Provided in FOCUS 7.0.9 and above.
pp	is the number of processors in the box.
qqqqqqqqqq	is the encrypted processor ID.

If your site code is not registered, the following message displays at the beginning of all FOCUS user sessions:

```
FOCUS 7.2.0 01/08/2002 13.39.43 27.02
*****
* VIOLATION: *
* THE SITE CODE FOR YOUR COMPANY WAS NOT REGISTERED PROPERLY *
* DURING THE FOCUS INSTALLATION PROCESS. PLEASE CONTACT IBI. *
* "EX READMEF" FOR COMPLETE DETAILS. *
*****
```