



## CCAPRINT

A Newsletter Excerpt for Model 204 Users

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## **XDM CRAM - Setting OS Subsystem Name via Parameter**

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If you use Cross Region Data Mover (XDM) CRAM then you are familiar with defining an OS Subsystem Name (SSN) as part of the XDM CRAM installation process. An SSN is a unique, four character name defined to the operating system via the SYS1.PARMLIB member IEFSSNxx. This name, along with a channel name, is used by BATCH2, IFAM2, SQL and TSO or CICS threads to connect to the desired target Online using XDM CRAM.

Prior to V6R1.0, the SSN was supplied via IGCLM244, the CRAM interface module that is loaded at run time both by the Online and by each application attempting to connect to that Online. The SSN is assembled into IGCLM244 as part of the CRAM installation process. To improve the flexibility of acquiring this SSN during Online initialization or CRAM application startup, V6R1.0 provides the capability of overriding the name specified in IGCLM244 via a run-time parameter.

### **XDM Initialization**

Before you start any Onlines that use XDM CRAM, you must submit the M204XDM job. This job handles all communications between Onlines and CRAM applications that connect to those Onlines. The JCL for this job is shown in Figure 1.

**Figure 1. JCL for the XDM job –to connect Online and CRAM applications**

```
//M204XDM EXEC PGM=M204XDM,PARM='MYV6'  
//STEPLIB DD DSN=your.V6R1.0.loadlib,DISP=SHR
```

Prior to V6R1.0, all Model 204 Onlines and CRAM applications that will use this XDM job for communicating with each other must have loaded a copy of IGCLM244 that was assembled with the parameter SUBSYS=MYV6.

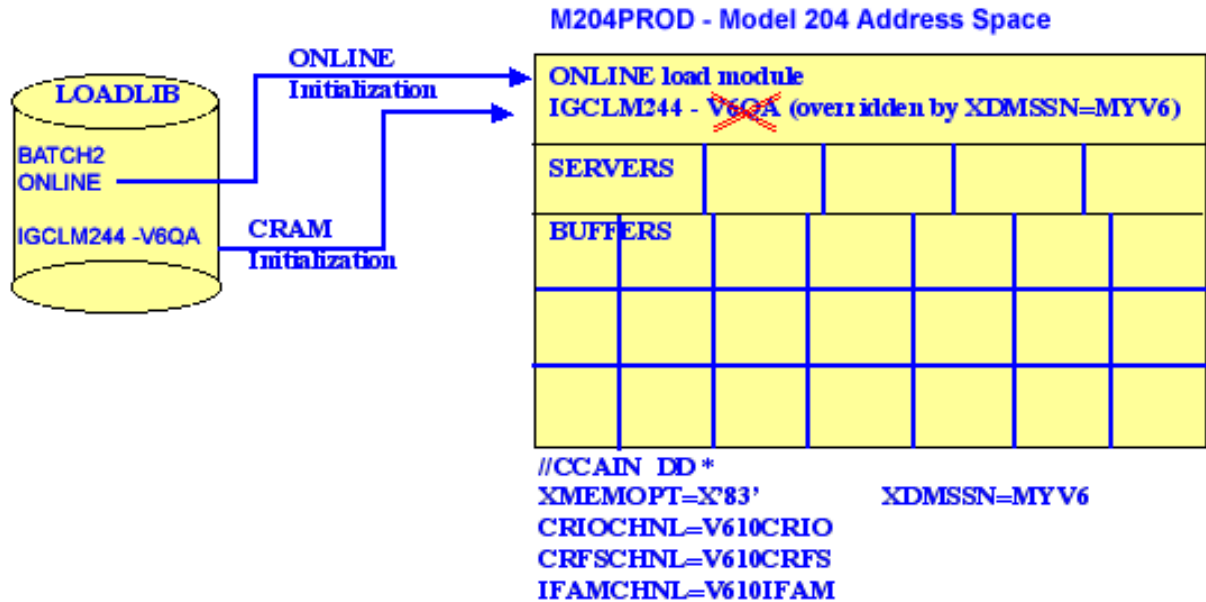
**Note:** Only one XDM job is required per Model 204 release. In other words, this XDM job can support multiple V6R1.0 Onlines--say production, development, and QA--all using the same OS Subsystem Name of MYV6. However, the CRAM channel names (CRIOCHNL, CRFSCHNL, and IFAMCHNL) in each of those Onlines must be unique since those parameters identify the target Online for a CRAM connection request.

### ONLINE Initialization

When an Online Model 204 initializes, XDM CRAM is also initialized if XMEMOPT includes the X'80' setting and there are IODEV=11,13, 23, or 29 threads defined. If this is the case, CRAM loads IGCLM244 from a load library that is either in the system link list or in a load library defined by the STEPLIB DD statement. The value of the SSN is extracted from IGCLM244 and is used to initialize CRAM.

However, in V6R1.0 the SSN value read from IGCLM244 can be overridden with a new CCAIN parameter, XDMSSN. The initialization process is illustrated in Figure 2.

Figure 2. Typical Online initialization setting the XDM name



The Online in Figure 2 initialized the CRAM interface using the SSN supplied by the XDMSSN parameter (MYV6), overriding the value assembled in IGCLM244 (V6QA). At this point, any BATCH2, IFAM2, SQL, TSO, or CICS user attempting to connect to this Online must use the correct channel name and must also load a copy of IGCLM244 that was assembled with the SUBSYS=MYV6 parameter to make the connection. In V6R1.0, however, BATCH2, IFAM2, SQL, TSO or CICS users can override the SSN supplied by IGCLM244 via a parameter.

## Connecting to M204PROD

Let's take BATCH2 as an example of an application needing to connect to this Online, M204PROD. Everything about this example applies equally to IFAM2 and SQL jobs as well as to TSO or CICS threads. If, in my BATCH2 JCL, I use the load library in Figure 2 as my STEPLIB DD, when BATCH2 initializes, it will load IGCLM244 and pick up the wrong value, V6QA, for the SSN. However, in V6R1.0, you can pass the SSN via parameter in the PARM field of the BATCH2 EXEC statement as shown in Figure 3.

Figure 3. Passing *ssn:channelname* via PARM field for a BATCH2 job

```
//BATCH2 EXEC PGM=BATCH2, PARM='MYV6:V610CRIO,OMC=64,URCTYPE=B'
```

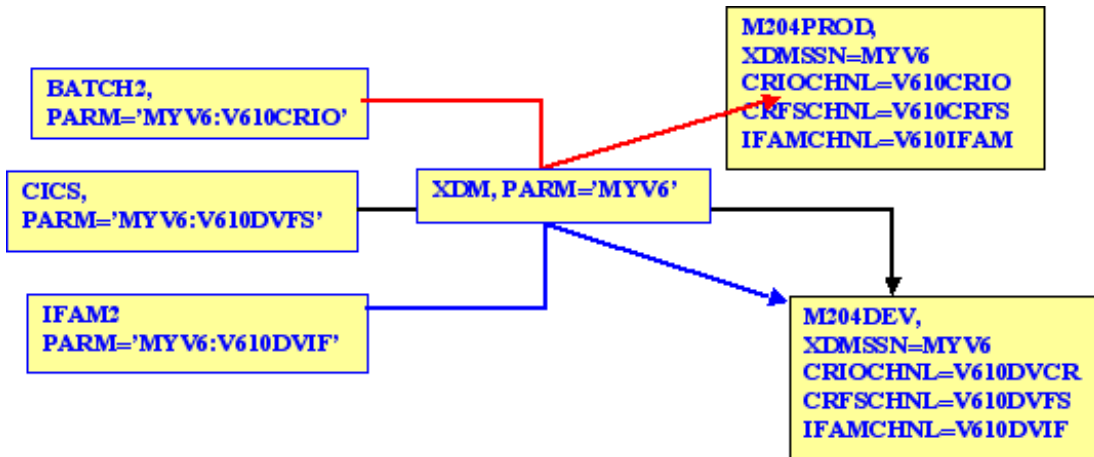
The channel name for an IODEV=29 connection, in this case V610CRIO, has always been required. In V6R1.0, the SSN may now be prefixed to the channel name using the syntax: **ssn:channelname**.

## A Production Environment

Figure 4 is a schematic of what a production environment might look like. Each box represents a job submitted to the operating system with the XDM job required to be the first. M204PROD and M204DEV are two Model 204 Onlines which are submitted next. After the Onlines are up, the applications on the left can connect to either one, depending on the channel name used in the PARM field of the EXEC statement. Each job visits the XDM job to get an address which ultimately allows the job to connect to the correct Online.

**Note:** All client applications shown, plus the XDM job, plus the Onlines must all be at the same release level using the same release of M204XSVC and IGCLM244. For this feature, the release level of all components must be V6R1.0

Figure 4. Typical Production Environment



## **In Summary**

If you are looking for more flexibility in the way you run XDM CRAM applications, consider using the dynamic OS Subsystem Name support in V6R1.0. This feature takes the guesswork out of trying to determine what SSN your IGCLM244 load module was assembled with during installation. That information may not be readily available but as long as you know the SSN in the Online your CRAM application is trying to connect to, you do not need to know anything about the IGCLM244 that Online initialized with. The same is true for the IGCLM244 that is being loaded by your CRAM application, since you can override whatever SSN value it was assembled with via the PARM field on the EXEC statement.

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