

Contents

- [1 Introduction](#)
- [2 UCCE/ICM Integration](#)
 - ◆ [2.1 ConAPI](#)
- [3 CUCM Integration](#)
 - ◆ [3.1 CUCM AXL Links](#)

Introduction

The intention of this section is to call out the two main interfaces that CCMP uses to import data from and provision items in Unified CCE: ConAPI and AXL.

UCCE/ICM Integration

Once you have your CCMP servers built & ready to be integrated into a UCCE solution, you need configure the ConAPI link between Unified CCMP and Unified CCE. This is performed initially on the Unified CCE Primary HDS AW.

ConAPI

- [What is ConAPI and CMS?](#) - We will cover what ConAPI/CMS is & how it operates.

CUCM Integration

Connectivity to CUCM is done through AXL. Unified CCMP communicates with the CUCM Publisher over TCP 8443 to read from (Data Importer Service) and write to (Provisioning Service) the CUCM database. The specific methods within AXL that CCMP uses are the executeSQLQuery and executeSQLUpdate methods. Before Unified CCMP 8.0 we used the specific get methods (e.g. getPhone) available in AXL however this proved to be expensive in terms of processing overhead. Using just these two methods means that we only have to handle the data we need thus making reads/updates much faster into CUCM.

Of these two methods only executeSQLUpdate is throttled in CUCM. This throttle limits the total number of changes to **1500 transactions** per minute and **cannot** be changed.

CUCM AXL Links

While not strictly necessary to support Unified CCMP, the following links provide you with detailed description of both AXL and its operation. Once reviewed you should have enough of an understanding to troubleshoot issues arising from AXL.

- [Cisco Developer Network - Administration AXL Pages](#)

Unified_CCMP_8.5(x)_ - Integration

- [CUCM 8.6\(1\) XML Developers Guide](#) - More specifically here is the [Administration AXL](#) pages from the Dev Guide. This is the AXL code used by Unified CCMP to read/write data to CUCM.
- [Introduction to Unified CM Interfaces slide deck \(Slides 7 through 29\)](#)
- [Learn Administrative AXL](#) - This PowerPoint slide deck provides a fairly deep dive coverage of AXL and the Direct Database Access (executeSQLQuery and executeSQLUpdate) methods employed by Unified CCMP to provision & import configuration from CUCM.