

mitsdiscover

Dynamic Change Update

Managing Changes in Hypercube Source Data

The Problem

The default configuration of a MITS Discover Hypercube functions as though the values in the underlying source data is static and does not change over time; however, this is not always the case.

The Solution

The Standard and Premium editions of MITS Discover include a feature known as *Dynamic Change Update* (or *DCU*). This feature allows you to manually or programmatically queue Hypercube records that need to be removed from the Hypercube and then re-added to the Hypercube.

NOTE: Dynamic Change Update is not available in the Lite edition of MITS Discover. If you are unsure of which MITS Discover edition you have purchased, contact your MITS Discover provider.

Configuring a Hypercube for DCU

Configuring a Hypercube for Dynamic Change Update requires the creation of three files in the MITS Discover operational database account. (This database account is usually named MITS.SYSTEM, and is the place where your Hypercubes are stored.)

These files are Hypercube-specific, and will need to be created for each Hypercube on your system that will require the Dynamic Change Update feature.

- MITS.REDOS_<appName>
- MITS.UNDOS_<appName>
- MITS.TODOS_<appName>

NOTE: In the file names above, replace “<appName>” with the name of your Hypercube. For example, if you were setting up the Dynamic Change Update feature for the SALESDEMO Hypercube, you would create the following three files: MITS.REDOS_SALESDEMO, MITS.UNDOS_SALESDEMO, and MITS.TODOS_SALESDEMO.

Using Dynamic Change Update

Once the three Dynamic Change Update files have been created, the MITS.MAKER.BUILD and MITS.LOAD processes (which are the programs that populate your Hypercubes with data) will begin to use them each time a build is run on that Hypercube. The Dynamic Change Update phase of the build occurs between the running of the preprocess command and the standard transformation phase.

Queuing a Record for Reprocessing

Create an empty record in the MITS.REDOS_<appName> file. This record must have the same item ID as the source file record that needs to be reprocessed. The next time a build is run on this Hypercube, these items will be removed from the Hypercube and re-added before the regular transformation phase adds any new transactions to the Hypercube.

NOTE: The MITS.TODOS_<appName> and MITS.UNDOS_<appName> files can also be used directly to add or remove transactions to/from the Hypercube.

Forcing a DCU-Only Build Process

The MITS.MAKER.BUILD and MITS.LOAD build programs include an option that can be used to process the Dynamic Change Update records immediately (instead of waiting for the next scheduled build):

```
MI TS. MAKER. BUILD <appName> (U  
MI TS. LOAD <appName> (U
```

Using one of these two commands will run the Preprocess Command (if applicable), process the DCU records, and run a build wrap-up.

For more information about the various options available for the MITS.MAKER.BUILD and MITS.LOAD programs, see the *MITS Discover Administration Guide*, which can be downloaded from <http://www.mits.com>.

What Happens During DCU?

The first step of the DCU process is to copy all records from the MITS.REDOS_<appName> file to both the MITS.UNDOS_<appName> file and the MITS.TODOS_<appName> file. Once this is complete, the records in the MITS.UNDOS_<appName> file are removed from the Hypercube. After this, the records in the MITS.TODOS_<appName> file are added to the Hypercube.

WARNING: If you choose to add records directly to the MITS.TODOS_<appName> file, keep in mind that this list of records will NOT be run through the filtering process(es) defined for this Hypercube before they are added. It is assumed that any records which appear in the MITS.TODOS_<appName> file have already been filtered as needed.

In Closing

The Dynamic Change Update feature of MITS Discover is a powerful tool that can add a great deal of flexibility and additional functionality to your MITS Discover Hypercubes if it has been configured properly.

If you have any questions about the Dynamic Change Update feature of MITS Discover, please contact your MITS Discover support provider for assistance.