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MDEF File Generation Requirements

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MDEF File Generation Requirements

Purpose

To define the basic/minimum requirements to generate a Meter Data Exchange Format (MDEF) file with mandatory data conforming to the MDEF format. This document is composed of the following sections:

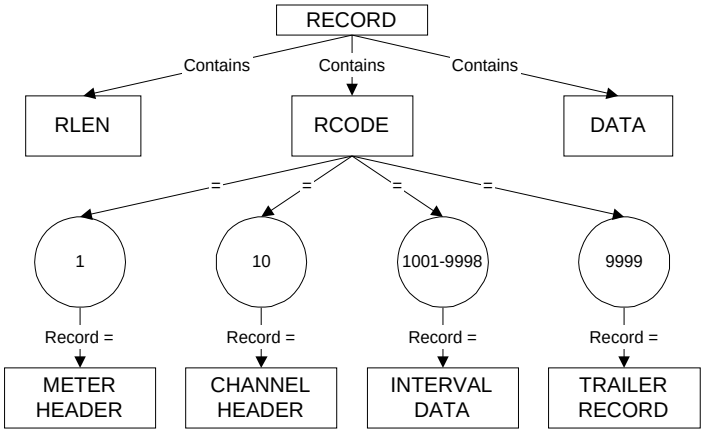
- MDEF Requirements Summary
- Overview Diagram of the MDEF Format
- Details of the MDEF Sample Files

MDEF Requirements Summary

The MDEF is composed of 216 byte record blocks, with each record block identified by an 'rcode'. Minimum number of record blocks required for a complete MDEF file are Meter Header, Channel Header, Interval Data, and Trailer, as outlined below.

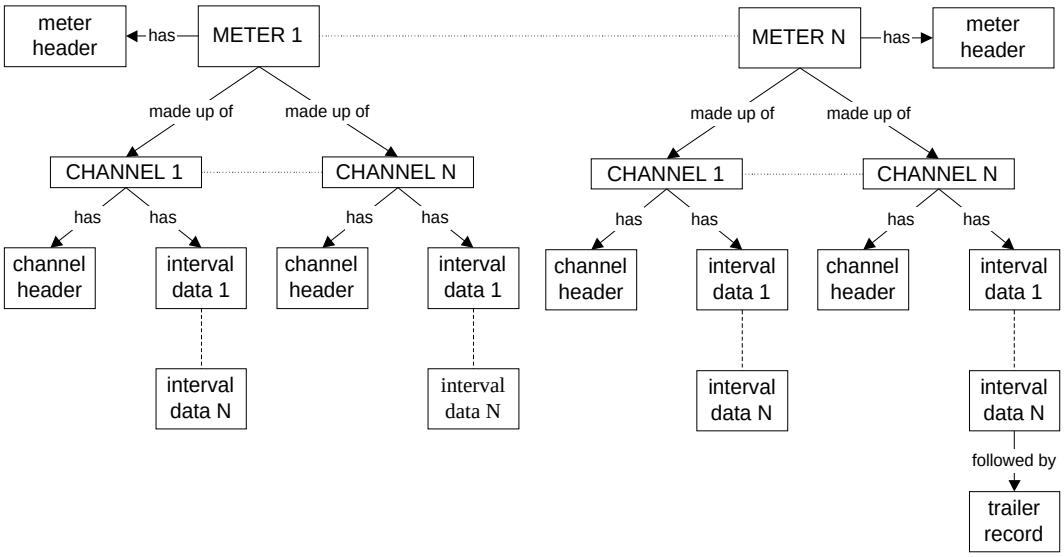
1. Meter Header must be completed for each Metering System ID (MSID) contained in the MDEF file submitted to the ISO MDAS. All Generation, Grid Connected Direct Access Load, and Load Group Take Out Points along with Intertie Points will be assigned a unique MSID by the ISO for each registered Scheduling Coordinator.
2. Channel Header must be completed for every channel referenced by that MSID Meter Header. The MSID should be stored in the 'Recorder ID' (Metering System/Site ID) field of the Channel Header portion of the MDEF file. Assuming 1 channel, only one Channel Header would be required.
3. Interval data for 1 hour intervals for the specified time period must be supplied within the Interval Data block. Assuming one day worth of data, the time span would be 24 hours of 1 hour interval readings. **Note:** Currently, the MDEF format does not support DST. An updated version of the MDEF format along with new requirements for populating the additional DST fields will be distributed later this year. Since DST is over at the end of October, the proposed DST changes will be scheduled for completion prior to April, 1998.
4. Trailer record must be completed.
5. The MDEF file name has to follow standard DOS file naming conventions, with the extension set to ".DAT" (e.g. "aaaaaaaa.DAT").

RECORD STRUCTURE



Every record in the file is comprised of a code, length and data. The code signifies what kind of data it holds. e.g. a record with an RCODE of 1 will hold meter header data.

FILE STRUCTURE



Every metering system will have a corresponding meter header record and one or more channel records. Subsequently each channel will have one channel header record with one or more interval data records. The last interval data of the file is followed by a trailer record. No general file header has been specified.

NB: If the unit of measure or the interval period changes for a channel a new channel header record will precede the data. When a channel is split then all channels for the device are split at the same time interval.