PM File Format Definition

Term	Definition	Comment
<PMFileFormat> :=	**<TableStructureRecord> <PMDataRecords>n**	File format defined in BNF like notation.
<TableStructureRecord> :=	"User Label" <SepChar> "MD Name" <SepChar> "MD Alias" <SepChar> "ME Name" <SepChar> "ME Alias" <SepChar> "PTP Name" <SepChar> "PTP Alias" <SepChar> "CTP Name" <SepChar> "CTP Alias" <SepChar> "ConnectionUserLabel" <SepChar> "Layer Rate" <SepChar> "Granularity" <SepChar> "Period Start Time" <SepChar> "Monitored Time" <SepChar> "PM Parameter" <SepChar> "Location" <SepChar> "Value" <SepChar> "Unit" <SepChar> "Status" <SepChar> "Nr Of Periods" <EORChars>	First record describes attribute names of the table.
<PMDataRecords> :=	<DescriptorRecord> [<PMValueRecord>]n	Note: Records are terminated by carriage return
<DescriptorRecord> :=	<UserLabel> <SepChar> <MDNameValue> <SepChar> [<MDAliasValue>] <SepChar> <MENameValue> <SepChar> [<MEAliasValue>] <SepChar> <PTPNameValue> <SepChar> [<PTPAliasValue>] <SepChar> [<CTPNameValue>] <SepChar> [<CTPAliasValue>] <SepChar> <ConnectionUserLabel> <SepChar> <LayerRate> <SepChar> <Granularity> <EORChars>	Descriptor record for PM records
<PMValueRecord> :=	<SepChar>11 <StartTime> <SepChar> [<MonitoredTime>] <SepChar> <PMParName> <SepChar> <Location> <SepChar> <Value> <SepChar> [<Unit>] <SepChar> <Status> <SepChar> [<NumberOfPeriods>] <EORChars>	PM record Separators make the file .csv compatible.

Term	Definition	Comment
<UserLabel> :=	String	userLabel as set by the requesting OS operation setUserLabel() for the TP
<MDNameValue> :=	String	value of the MD object name
<MDAliasValue> :=	String	Alias for the MD object. This field may be empty if the Alias equals the object name.
<MENameValue> :=	String	value of the ME part of the ME object name
<MEAliasValue> :=	String	Alias for the ME object. This field may be empty if the Alias equals the object name.
<PTPNameValue> :=	String	value of the PTP part of the name of the containing PTP/FTP object (if measurement is at the CTP) or of the PTP/FTP object itself (if measurement is at the PTP/FTP) according to the *PTPName*
<PTPAliasValue> :=	String	Alias for the (containing) PTP/FTP object This field may be empty if the Alias equals the object name.
<CTPNameValue> :=	String	CTP object name according to the *CTPName*. This field is empty if the measurement refers to the PTP.
<CTPAliasValue> :=	String	Alias for the CTP object. This field is empty if the measurement refers to the PTP. It may be empty if the Alias equals the object name.
<ConnectionUserLabel> :=	String	User Label of the connection (e.g., SNC, TL) associated to the TP providing the PM data.

Term	Definition	Comment
<LayerRate> :=	String	This is the layerRate associated with the provided performance measurement. It is defined according to SD1-17 (e.g., "LR_VT2_and_TU12_VC12").
<Granularity> :=	String	value according to performance::Granularity_T
<StartTime> :=	String	value according to globaldefs::Time_T Is the period start time of the interval for which data is being reported. Time is aligned in UTC. In case of zero-suppression this identifies the start time of the first record.
<MonitoredTime> :=	Integer	optional, default value empty field if not supported Gives the number of seconds monitored within the measurement period. Empty field means that the whole measurement period is monitored or that information is not supported at all.
<PMParName> :=	String	value according to performance::PMParameterName_T (see SD1-28)
<Location> :=	String	value according to performance::PMLocation_T
<Value> :=	Float	Accounts both gauge and digital values.
<Unit> :=	String	For gauge values this is the unit of the measurement. For counter values this is empty.

Term	Definition	Comment
<Status> :=	"Valid" | "Incomplete" | "Invalid" | "Unavailable" | "Zero-suppressed"	• Valid - valid data for the whole interval. • Incomplete - data available for a part of the measurement interval (optional - time monitored given in the monitored time). • Invalid - data available but marked as invalid for the interval (when the target OS can not distinguish incomplete measurements from invalid measurements, "Invalid" will be used) • Unavailable - no data is available for a specified TP measurement point within the time period. • Zero-suppressed - optional, means record contains a number of valid measurement intervals with a zero value (number of intervals given in next field)
<NumberOfPeriods> :=	Integer	optional, empty field if not supported (means 1) Counts the number of periods with the same value and status starting with <StartTime> (e.g., used for zero suppression). A number of zero-suppressed records is represented by one record with the status field "Zero_suppressed" and the number of zero value intervals indicated by numberOfPeriods. Zero-suppressed records should have a full/complete monitored time. If not, extra zero record(s) with incomplete monitoredTime should be added.

Term	Definition	Comment
<SepChar> :=	,	Comma separates fields of a record.
<EORChars> :=	carriage return character, followed by line feed character	Terminates records.
String :=	a printable character set	The set is delimited by double-quotes except CR (Carriage Return). A double-quote character has to be marked by an extra double-quote.
Integer :=	a digit character sequence	unsigned integer number in decimal ASCII representation
Float :=	a character sequence with digits, signs or points	float number in decimal ASCII representation

See SD1-31_PMExample.txt and SD1-32_PMExample.xls for PM file format examples in plain text and MS Excel format respectively.

1 Administrative Appendix

1.1 Document History

Version	Date	Description of Change
3.0	June 2005	Conversion into new template.
3.1	December 2005	Version in names of referenced supporting documents deleted.
3.2	December 2005	PM file format examples directly added to the document.
3.3	October 2007	Updates for inclusion in MTOSI Rel. 2.0 BA release (S. Fratini)
3.4	December 2007	Updated the names of the entities to align with MTOSI naming, i.e., used MD instead of EMS and Alias instead of NativeName (S. Fratini).
3.5	August 2011	ConnectionUserLabel added.

1.2 Acknowledgments

First Name	Last Name	Company

1.3 How to comment on this document

Comments and requests for information must be in written form and addressed to the contact identified below:

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Please be specific, since your comments will be dealt with by the team evaluating numerous inputs and trying to produce a single text. Thus we appreciate significant specific input. We are looking for more input than wordsmith" itMD, however editing and structural help are greatly appreciated where better clarity is the result.