

ASSETLOCRELATION

The AssetLocRelation table

Table

psdi.app.asset.AssetLocRelationSet

UniqueID: ASSETLOCRELATIONID

Primary key: ASSETRELATIONNUM + SOURCEASSETNUM + TARGETASSETNUM + LINEARASSETLOCRELATIONID

LOGICAL RELATIONSHIPS

FOREIGN KEYS INTO ASSETLOCRELATION

Object(Parent Keys)	Target Object(Target Keys)	Rel Number	Description
<u>ASSETLOCRELATION</u> (ASSETLOCRELATIONID)	ASSETFEATURE(ASSETLOCRELATIONID)	1 to many	Asset / Location Relation
<u>ASSETLOCRELATION</u> (ASSETLOCRELATIONID)	ASSETFEATUREHIST(ASSETLOCRELATIONID)	1 to many	Asset / Location Relation
<u>ASSETLOCRELATION</u> (ASSETLOCRELATIONID)	LNRRECALIB(ASSETLOCRELATIONID)	1 to many	Asset / Location Relation

ASSETLOCRELATION FOREIGN KEYS

Object(Parent Keys)	Target Object(Target Keys)	Rel Number	Description
<u>ASSET</u> (SITEID, ASSETNUM)	<u>ASSETLOCRELATION</u> (SITEID, SOURCEASSETNUM)	1 to many	AssetLocRelation records on which the current Asset is source of the linear relationship. (Linear)
<u>ASSET</u> (SITEID, ASSETNUM)	<u>ASSETLOCRELATION</u> (SITEID, TARGETASSETNUM)	1 to many	AssetLocRelation records on which the current Asset is target of the linear relationship. (Linear)
<u>ASSETFEATURE</u> (ASSETFEATUREID)	<u>ASSETLOCRELATION</u> (SOURCEENDASSETFEATUREID)	1 to many	Source End Asset Feature
<u>ASSETFEATURE</u> (ASSETFEATUREID)	<u>ASSETLOCRELATION</u> (SOURCESTARTASSETFEATUREID)	1 to many	Source Start Asset Feature
<u>ASSETFEATURE</u> (ASSETFEATUREID)	<u>ASSETLOCRELATION</u> (TARGETENDASSETFEATUREID)	1 to many	Target End Asset Feature
<u>ASSETFEATURE</u> (ASSETFEATUREID)	<u>ASSETLOCRELATION</u> (TARGETSTARTASSETFEATUREID)	1 to many	Target Start Asset Feature
<u>LOCATIONS</u> (SITEID, LOCATION)	<u>ASSETLOCRELATION</u> (SITEID, SOURCELOCATION)	1 to many	Source Location
<u>LOCATIONS</u> (SITEID, LOCATION)	<u>ASSETLOCRELATION</u> (SITEID, TARGETLOCATION)	1 to many	Target Location
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (SOURCEBASEMEASUREUNITID)	1 to many	Source Base Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (SOURCEENDMEASUREUNITID)	1 to many	Source End Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (SOURCEENDOFFSETUNITID)	1 to many	Source End Offset Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (SOURCESTARTMEASUREUNITID)	1 to many	Source Start Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (SOURCESTARTOFFSETUNITID)	1 to many	Source Start Offset Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (TARGETBASEMEASUREUNITID)	1 to many	Target Base Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (TARGETENDMEASUREUNITID)	1 to many	Target End Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (TARGETENDOFFSETUNITID)	1 to many	Target End Offset Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (TARGETSTARTMEASUREUNITID)	1 to many	Target Start Measure Unit
<u>MEASUREUNIT</u> (MEASUREUNITID)	<u>ASSETLOCRELATION</u> (TARGETSTARTOFFSETUNITID)	1 to many	Target Start Offset Measure Unit
<u>ORGANIZATION</u> (ORGID)	<u>ASSETLOCRELATION</u> (ORGID)	1 to many	Organization for the record
<u>RELATION</u> (RELATIONNUM)	<u>ASSETLOCRELATION</u> (ASSETRELATIONNUM)	1 to many	Relationship Information
<u>SITE</u> (SITEID)	<u>ASSETLOCRELATION</u> (SITEID)	1 to many	Site for the record

COLUMNS

Attribute	Modifier	Title	Remarks	SameAsAttrib	SameAsObject
SOURCEASSETNUM		Source Asset	Source asset or location is related to a target asset or location.	ASSETNUM	<u>ASSET</u>
SOURCELOCATION		Source Location	Location related to a linear asset	LOCATION	<u>LOCATIONS</u>

Attribute	Modifier	Title	Remarks	SameAsAttrib	SameAsObject
TARGETASSETNUM		Target Asset	Source asset or location is related to the target asset or location	ASSETNUM	<u>ASSET</u>
TARGETLOCATION		Target Location	Location related to a linear asset	LOCATION	<u>LOCATIONS</u>
SOURCESTARTMEASURE		Source Start Measure	Absolute distance taken from the start of the source asset to where this relationship starts. This can be manually entered or calculated by entering a start reference point and start offset.	STARTMEASURE	<u>ASSET</u>
TARGETSTARTMEASURE		Target Start Measure	Absolute distance taken from the start of the target asset to where this relationship starts. This can be manually entered or calculated by entering start reference points and start offset.	STARTMEASURE	<u>ASSET</u>
SOURCEENDMEASURE		Source End Measure	Absolute distance taken from the start of the source asset to where this relationship ends. This can be manually entered or calculated by entering an end reference point and end offset.	STARTMEASURE	<u>ASSET</u>
TARGETENDMEASURE		Target End Measure	Absolute distance taken from the start of the target asset to where this relationship ends. This can be manually entered or calculated by entering an end reference point and end offset.	STARTMEASURE	<u>ASSET</u>
SOURCESTARTOFFSET		Source Start Offset	Distance used in conjunction with the start reference point to determine where the current relationship starts.	STARTMEASURE	<u>ASSET</u>
SOURCESTARTYOFFSET		Source Start Y Offset	Perpendicular distance from this linear asset. For example, if a sign is 10 feet to the right of the road, the Y-Offset is 10 feet. This value is measured from the Y Reference Point and can be positive (right) or negative (left).	STARTMEASURE	<u>ASSET</u>
SITEID		Site	Site where the source asset/location and the target asset/location are located.	SITEID	<u>SITE</u>
ORGID		Organization	Organization Identifier	ORGID	<u>ORGANIZATION</u>
SOURCESTARTZOFFSET		Source Start Z Offset	Distance above or below this linear asset. For example, if a sign is 10 feet above the road, the Z-Offset is 10 feet. This value is measured from the Z Reference Point and can be positive (above) or negative (below).	STARTMEASURE	<u>ASSET</u>
TARGETSTARTOFFSET		Target Start Offset	Distance used in conjunction with the start reference point to determine where the current relationship starts.	STARTMEASURE	<u>ASSET</u>
TARGETSTARTYOFFSET		Target Start Y Offset	Perpendicular distance from this linear asset. For example, if a sign is 10 feet to the right of the road, the Y-Offset is 10 feet. This value is measured from the Y Reference Point and can be positive (right) or negative (left).	STARTMEASURE	<u>ASSET</u>
TARGETSTARTZOFFSET		Target Start Z Offset	Distance above or below this linear asset. For example, if a sign is 10 feet above the road, the Z-Offset is 10 feet. This value is measured from the Z Reference Point and can be positive (above) or negative (below).	STARTMEASURE	<u>ASSET</u>
SOURCEENDOFFSET		Source End Offset	Distance used in conjunction with the end reference point to determine where the current relationship ends.	STARTMEASURE	<u>ASSET</u>

Attribute	Modifier	Title	Remarks	SameAsAttrib	SameAsObject
SOURCEENDYOFFSET		Source End Y Offset	Perpendicular distance from this linear asset. For example, if a sign is 10 feet to the right of the road, the Y-Offset is 10 feet. This value is measured from the Y Reference Point and can be positive (right) or negative (left).	STARTMEASURE	<u>ASSET</u>
SOURCEENDZOFFSET		Source End Z Offset	Distance above or below this linear asset. For example, if a sign is 10 feet above the road, the Z-Offset is 10 feet. This value is measured from the Z Reference Point and can be positive (above) or negative (below).	STARTMEASURE	<u>ASSET</u>
TARGETENDOFFSET		Target End Offset	Distance used in conjunction with the end reference point to determine where the current relationship ends.	STARTMEASURE	<u>ASSET</u>
TARGETENDYOFFSET		Target End Y Offset	Perpendicular distance from this linear asset. For example, if a sign is 10 feet to the right of the road, the Y-Offset is 10 feet. This value is measured from the Y Reference Point and can be positive (right) or negative (left).	STARTMEASURE	<u>ASSET</u>
TARGETENDZOFFSET		Target End Z Offset	Distance above or below this linear asset. For example, if a sign is 10 feet above the road, the Z-Offset is 10 feet. This value is measured from the Z Reference Point and can be positive (above) or negative (below).	STARTMEASURE	<u>ASSET</u>
SOURCESTARTASSETFEATUREID		Source Start Asset Feature ID	A previously defined feature or relationship used, in conjunction with the start offset, to determine the start measure for the linear segment of the source asset.	ASSETFEATUREID	<u>ASSETFEATURE</u>
TARGETSTARTASSETFEATUREID		Target Start Asset Feature ID	A previously defined feature or relationship used, in conjunction with the start offset, to determine the start measure for the linear segment of the target asset.	ASSETFEATUREID	<u>ASSETFEATURE</u>
SOURCEENDASSETFEATUREID		Source End Asset Feature ID	A previously defined feature or relationship used, in conjunction with the end offset, to determine the end measure for the linear segment of the source asset.	ASSETFEATUREID	<u>ASSETFEATURE</u>
TARGETENDASSETFEATUREID		Target End Asset Feature ID	A previously defined feature or relationship used, in conjunction with the end offset, to determine the end measure for the linear segment of the target asset.	ASSETFEATUREID	<u>ASSETFEATURE</u>
ASSETLOCRELATIONID	Required	Unique Id	Unique Id		
ASSETRELATIONNUM	Required	Relation	Asset Relationship identifier	RELATIONNUM	<u>RELATION</u>
CREATEDDATE		Created Date	The Date when the relation between the two Assets were established		
SOURCESTARTFEATURELABEL	Nonpersistent	Reference Point	Where the relationship starts in terms of a readily identifiable reference point (e.g. Mile Post 27). The start measure of the reference point + start offset = start measure for the source asset in this relationship.	LABEL	<u>ASSETFEATURE</u>
SOURCEENDFEATURELABEL	Nonpersistent	Reference Point	Where the relationship ends in terms of a readily identifiable reference point (e.g. Mile Post 27). The end measure of the end reference point + end offset = end measure for the source asset in this relationship.	LABEL	<u>ASSETFEATURE</u>
TARGETSTARTFEATURELABEL	Nonpersistent	Reference Point	Where the relationship starts in terms of a readily identifiable reference point (e.g. Mile Post 27). The start measure of the reference point + start offset = start measure for the target asset in this relationship.	LABEL	<u>ASSETFEATURE</u>

Attribute	Modifier	Title	Remarks	SameAsAttrib	SameAsObject
TARGETENDFEATURELABEL	Nonpersistent	Reference Point	Where the relationship ends in terms of a readily identifiable reference point (e.g. Mile Post 27). The end measure of the end reference point + end offset = end measure for the target asset in this relationship.	LABEL	<u>ASSETFEATURE</u>
SOURCESTARTYOFFSETREF		Source Start Y Offset Reference	Reference point from which the start Y-Offset (measure to the left or right of the linear asset) is measured.		
SOURCEENDYOFFSETREF		Source End Y Offset Reference	Point from which the Y-Offset is measured.		
SOURCESTARTZOFFSETREF		Source Start Z Offset Reference	Point from which the Z-Offset is measured.		
SOURCEENDZOFFSETREF		Source End Z Offset Reference	Point from which the Z-Offset is measured.		
TARGETSTARTYOFFSETREF		Target Start Y Offset Referent	Reference point from which the start Y-Offset (measure to the left or right of the linear asset) is measured.		
TARGETENDYOFFSETREF		Target End Y Offset Referent	Reference point from which the end Y-Offset (measure to the left or right of the linear asset) is measured.		
TARGETSTARTZOFFSETREF		Target Start Z Offset Referent	Reference point from which the start Z-Offset (distance above or below the linear asset) is measured.		
TARGETENDZOFFSETREF		Target End Z Offset Referent	Point from which the Z-Offset is measured.		
ISLINEARREF	Required	Is Reference Point	Specifies whether you can use the relationship as a start or end point for a linear segment. If the check box is selected (the default), Maximo will create an feature instance that you can use as a start or end reference point. If the check box is cleared, you cannot.		
SOURCEBASEMEASUREUNITID		Unit of Source Base Measure	Base unit of measure. Only differs from the linear asset's unit of measure when the values need to be stored in an additional unit of measure than that normally displayed (and stored).	MEASUREUNITID	<u>MEASUREUNIT</u>
SOURCEENDBASEMEASURE		Source End Base Measure	Measurement taken from the start of this linear asset to where this asset ends. This can be manually measured and entered or calculated using the EndLabel and EndOffset.	STARTMEASURE	<u>ASSET</u>
SOURCEENDMEASUREUNITID		Unit of Source End Measure	End Measure Units	MEASUREUNITID	<u>MEASUREUNIT</u>
SOURCEENDOFFSETUNITID		Unit of Source End Offset	End Offset Units	MEASUREUNITID	<u>MEASUREUNIT</u>
SOURCESTARTBASEMEASURE		Source Start Base Measure	Measurement taken from the start of this linear asset to where this asset is initially encountered. This can be manually measured and entered or calculated using the StartLabel and StartOffset.	STARTMEASURE	<u>ASSET</u>
SOURCESTARTMEASUREUNITID		Unit of Source Start Measure	Start Measure Units	MEASUREUNITID	<u>MEASUREUNIT</u>
SOURCESTARTOFFSETUNITID		Unit of Source Start Offset	start Offset Units	MEASUREUNITID	<u>MEASUREUNIT</u>
TARGETBASEMEASUREUNITID		Unit of Target Base Measure	Unit of target base measure name	MEASUREUNITID	<u>MEASUREUNIT</u>

Attribute	Modifier	Title	Remarks	SameAsAttrib	SameAsObject
TARGETSTARTMEASUREUNITID		Unit of Target Start Measure	start Measure Units	MEASUREUNITID	<u>MEASUREUNIT</u>
TARGETSTARTOFFSETUNITID		Unit of Target Start Offset	Start Measure Units	MEASUREUNITID	<u>MEASUREUNIT</u>
TARGETENDMEASUREUNITID		Unit of Target End Measure	End Measure Units	MEASUREUNITID	<u>MEASUREUNIT</u>
TARGETENDOFFSETUNITID		Unit of Target End Offset	End Offset Units	MEASUREUNITID	<u>MEASUREUNIT</u>
TARGETSTARTBASEMEASURE		Target Start Base Measure	Measurement taken from the start of this linear asset to where this asset is initially encountered. This can be manually measured and entered or calculated using the StartLabel and StartOffset.	STARTMEASURE	<u>ASSET</u>
TARGETENDBASEMEASURE		Target End Base Measure	Measurement taken from the start of this linear asset to where this asset ends. This can be manually measured and entered or calculated using the EndLabel and EndOffset.	STARTMEASURE	<u>ASSET</u>
ASSETLOCRELHISTID		Unique Id	Unique Id		
LINEARASSETLOCRELATIONID	Required	Linear Specification Id	Part of the primary key to differentiate Linear asset assetlocrelation's only.		
AFUPDATESAR	Nonpersistent	Is Asset Relationship measures modified by Asset Feature	Is Asset Relationship measures modified by Asset Feature		
RELSEQUENCENUM		Sequence Number	Use sequence numbers to list relationships in a logical order, rather than in the order of entry. For example, you can view the assets in a circuit from the starting asset, through several connections, to the terminating asset. If you increment each sequence number by 10, you can insert additional relationships at any point, using a smaller number.		

MAXIMO RELATIONSHIPS

MAXIMO OUTGOING RELATIONSHIPS

Name	Target	Remarks	
ASSET	<u>ASSET</u>	Relationship to the Asset table, used to find all assets for a given sourceasset or targetasset	assetnum=:s assetnum=:t siteid=:siteid
SOURCEASSET	<u>ASSET</u>	Relationship to the Asset table, used to find Asset for a given sourceasset.	assetnum=:s siteid=:siteid
SOURCELINEARASSET	<u>ASSET</u>	Relationship to the Asset table, used to find this AssetLocRelation's linear Asset. (assetlocrelation.sourceassetnum=asset.assetnum and assetlocrelation.siteid=asset.siteid). The resulting set will contain one object.	assetnum=:s siteid=:siteid
TARGETASSET	<u>ASSET</u>	Relationship to the Asset table, used to find Asset for a given targetasset.	assetnum=:t siteid=:siteid
TARGETLINEARASSET	<u>ASSET</u>	Relationship to the Asset table, used to find this AssetLocRelation's linear Asset. (assetlocrelation.targetassetnum=asset.assetnum and assetlocrelation.siteid=asset.siteid). The resulting set will contain one object.	assetnum=:t siteid=:siteid
TARGETENDASSETFEATURE	<u>ASSETFEATURE</u>	Relationship to the assetfeature table, used to find the assetfeature record for a given assetlocrelation for its target end asset feature. (assetfeature.assetfeatureid=assetlocrelation.targetendassetfeatureid) The resulting set will contain one object.	assetfeatureid

Name	Target	Remarks	
TARGETSTARTASSETFEATURE	<u>ASSETFEATURE</u>	Relationship to the assetfeature table, used to find the assetfeature record for a given assetlocrelation for its target start asset feature. (assetfeature.asseetfeatureid=assetlocrelation.targetstartassetfeatureid) The resulting set will contain one object.	assetfeaturei
SOURCEENDASSETFEATURE	<u>ASSETFEATURE</u>	Relationship to the assetfeature table, used to find the assetfeature record for a given assetlocrelation for its source end asset feature. (assetfeature.asseetfeatureid=assetlocrelation.sourceendassetfeatureid) The resulting set will contain one object.	assetfeaturei
SOURCESTARTASSETFEATURE	<u>ASSETFEATURE</u>	Relationship to the assetfeature table, used to find the assetfeature record for a given assetlocrelation for its source start asset feature. (assetfeature.asseetfeatureid=assetlocrelation.sourcestartassetfeatureid) The resulting set will contain one object.	assetfeaturei =:sourcestar
ASSETFEATURE	<u>ASSETFEATURE</u>	Relationship to the AssetFeature table, used to find a Asset feature record for a given AssetLoc Relationship. (AssetLocRelation.assetlocrelationid= AssetFeature.assetlocrelationi). The resulting set will contain zero or one object.	assetlocrelat
ASSETREL_ASSETREL	<u>ASSETLOCRELATION</u>	Relationship to AssetLocRelation table to find a AssetRelationship record.	sourceassetr targetassetn siteid=:sitei assetlocrelat
NEWRELATION	<u>ASSETLOCRELATION</u>	new assetlocrelationship	sourceassetr assetrelatio and targetas
ASSETLOCRELHIST	<u>ASSETLOCRELHIST</u>	Relationship to the ASSETLOCRELHIST table, used to find ASSETLOCRELHIST records for a given ASSETLOCRELATION.	sourceassetr targetassetn assetrelatio
SOURCELOCATION	<u>LOCATIONS</u>	Relationship to the Locations table,used to find location for a given sourcelocation	location=:so siteid=:sitei
TARGETLOCATION	<u>LOCATIONS</u>	Relationship to the locations table, used to find location for a given targetlocation.	location=:ta
RELATION	<u>RELATION</u>	Relationship to the RELATION table, used to find relation for a given ASSETLOCRELATION relation.	relationnum

MAXIMO INCOMING RELATIONSHIPS

Name	Source	Remarks	Where Clause	Cardinali
ASSETLOCRELATION	<u>ASSET</u>	Relationship to the ASSETLOCRELATION table, used to find related asset's for give Asset.	sourceassetnum =:assetnum or targetassetnum =:assetnum and siteid =:siteid	UNDEFIN.
ASSETLOCRELATION_ALL	<u>ASSET</u>	Relationship to the AssetLocRelation table used to find AssetLocRelationships for this Asset that fall within the range of the asset's FROMMEASURE and TOMEASURE.	((sourceassetnum=:assetnum and ((sourcestartmeasure <= :frommeasure and sourceendmeasure >= :frommeasure) or (sourcestartmeasure <= :tomeasure and sourceendmeasure >= :tomeasure) or (sourcestartmeasure >= :frommeasure and sourceendmeasure <= :tomeasure) or (sourcestartmeasure >= :tomeasure and sourceendmeasure <= :frommeasure) or (sourcestartmeasure is null and sourceendmeasure is null))) or (targetassetnum=:assetnum and ((targetstartmeasure <= :frommeasure and targetendmeasure >= :frommeasure) or (targetstartmeasure <= :tomeasure and targetendmeasure >= :tomeasure) or (targetstartmeasure >= :frommeasure and targetendmeasure <= :tomeasure) or (targetstartmeasure >= :tomeasure and targetendmeasure <= :frommeasure) or (targetstartmeasure is null and targetendmeasure is null)))) and siteid=:siteid	UNDEFIN.
RELATEDASSET	<u>ASSET</u>	For given asset, retrieve its all related assets, either as source or as target	sourceassetnum=:assetnum or targetassetnum=:assetnum	UNDEFIN.

Name	Source	Remarks	Where Clause	Cardinali
LNRASSETLOCRELATION	<u>ASSETFEATURE</u>	Relationship to the AssetLocRelation table used to find AssetLocRelationships for this AssetFeature	(sourcestartassetfeatureid=:assetfeatureid or sourceendassetfeatureid=:assetfeatureid) or (targetstartassetfeatureid=:assetfeatureid or targetendassetfeatureid=:assetfeatureid)	UNDEFIN.
ASSETLOCRELATION	<u>ASSETFEATURE</u>	Relationship to the AssetLoc Relationship table, used to find a Asset Relationship record for a given AssetFeature. (AssetFeature.assetlocrelationid= AssetLocRelation.assetlocrelationi). The resulting set will contain zero or one object.	assetlocrelationid=:assetlocrelationid	null
ASSETREL_ASSETREL	<u>ASSETLOCRELATION</u>	Relationship to AssetLocRelation table to find a AssetRelationship record.	sourceassetnum=:sourceassetnum and targetassetnum=:targetassetnum and siteid=:siteid and assetlocrelationid=:assetlocrelationid	null
NEWRELATION	<u>ASSETLOCRELATION</u>	new assetlocrelationship	sourceassetnum=:sourceassetnum and assetrelationnum=:assetrelationnum and targetassetnum=:targetassetnum	UNDEFIN.
ASSETLOCRELATION	<u>LNRRECALIB</u>	Relationship to the AssetLoc Relationship table, used to find a Asset Relationship record for a given LNRRecalib.	assetlocrelationid=:assetlocrelationid	null
ASSETLOCRELATION	<u>LOCATIONS</u>	Relationship to the ASSETLOCRELATION table, used to find related location's for given Location.	sourcelocation =:location or targetlocation =:location and siteid =: siteid	UNDEFIN.
ASSETLOCRELATION	<u>RELATION</u>	Relationship to the ASSETLOCRELATION table, used to find assetlocrelation for a given RELATION .	assetrelationnum=:relationnum	UNDEFIN.