#### pivotCacheDefinition (PivotCache Definition)

Represents the pivotCacheDefinition part. This part defines each [field](field.docx) in the source data, including the name, the string resources of the instance data (for shared items), and information about the type of data that appears in the field.

[Example:

<pivotCacheDefinition xmlns="…" xmlns:r="…" r:id="rId1" refreshedBy="AnonUser"  
 refreshedDate="2006-05-22T10:07:16" createdVersion="3" refreshedVersion="3"   
 minRefreshableVersion="3" recordCount="182">

<[cacheSource](cacheSource.docx) type="[worksheet](worksheet.docx)">  
 <[worksheetSource](worksheetSource.docx) name="Table1"/>  
 </[cacheSource](cacheSource.docx)>

<[cacheFields](cacheFields.docx) count="28">  
 <[cacheField](cacheField.docx) name="Customer Name" numFmtId="0">  
 <[cacheField](cacheField.docx) name="Postal Code" numFmtId="0">  
 <[sharedItems](sharedItems.docx)/>  
 </[cacheField](cacheField.docx)>

<[cacheField](cacheField.docx) name="Product Category" numFmtId="0">  
 <[sharedItems](sharedItems.docx) count="1">  
 <s [v](v.docx)="Bikes"/>  
 </[sharedItems](sharedItems.docx)>  
 </[cacheField](cacheField.docx)>

<[cacheField](cacheField.docx) name="Year" numFmtId="0">  
 <[sharedItems](sharedItems.docx) count="1">  
 <s [v](v.docx)="2001"/>  
 </[sharedItems](sharedItems.docx)>  
 </[cacheField](cacheField.docx)>

<[cacheField](cacheField.docx) name="Quarter" numFmtId="0">  
 <[sharedItems](sharedItems.docx) containsSemiMixedTypes="0" containsString="0"   
 containsNumber="1" containsInteger="1" minValue="3" maxValue="3"   
 count="1">  
 <[n](n.docx) [v](v.docx)="3"/>  
 </[sharedItems](sharedItems.docx)>  
 </[cacheField](cacheField.docx)>  
 </[cacheFields](cacheFields.docx)>  
</pivotCacheDefinition>

end example]

|  |
| --- |
| Parent Elements |
| Root element of SpreadsheetML Pivot Table Cache Definition part |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [cacheFields](cacheFields.docx) (PivotCache Fields) | § |
| [cacheHierarchies](cacheHierarchies.docx) (PivotCache Hierarchies) | § |
| [cacheSource](cacheSource.docx) (PivotCache Source Description) | § |
| [calculatedItems](calculatedItems.docx) (Calculated Items) | § |
| [calculatedMembers](calculatedMembers.docx) (Calculated Members) | § |
| [dimensions](dimensions.docx) (OLAP Dimensions) | § |
| [extLst](extLst.docx) (Future Feature Data Storage Area) | § |
| [kpis](kpis.docx) (OLAP KPIs) | § |
| [maps](maps.docx) (OLAP Measure Group) | § |
| [measureGroups](measureGroups.docx) (OLAP Measure Groups) | § |
| [tupleCache](tupleCache.docx) (Tuple Cache) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| backgroundQuery (Background Query) | Specifies a boolean value that indicates whether the application should [query](query.docx) and retrieve records asynchronously from the cache.  A value of on, 1, or true indicates the application will retrieve records asynchronously from the cache.  A value of off, 0, or false indicates the application will retrieve records synchronously.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| createdVersion (PivotCache Created Version) | Specifies the version of the application that created the cache. This attribute is application-dependent.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) unsignedByte datatype. |
| enableRefresh (Enable PivotCache Refresh) | Specifies a boolean value that indicates whether the end-user can refresh the cache. This attribute depends on whether the application exposes a method for allowing end-users [control](control.docx) over refreshing the cache via the user interface.  A value of on, 1, or true indicates the end-user can refresh the cache.  A value of off, 0, or false indicates the end-user cannot refresh the cache.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| id (Relationship Identifier)  Namespace: .../officeDocument/2006/relationships | Specifies the unique identifier that corresponds to the related [pivotCacheRecords](pivotCacheRecords.docx) part. See (§) for more information.  The possible values for this attribute are defined by the ST\_RelationshipId simple type (§). |
| invalid (Invalid Cache) | Specifies a boolean value that indicates whether the cache is invalid and needs to be refreshed.  A value of on, 1, or true indicates the cache is invalid and needs to be refreshed.  A value of off, 0, or false indicates the cache does not need to be refreshed.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| minRefreshableVersion (Minimum Version Required for Refresh) | Specifies the earliest version of the application that is required to refresh the cache. This attribute is application-dependent.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) unsignedByte datatype. |
| missingItemsLimit (Missing Items Limit) | Specifies the number of unused [items](items.docx) to allow before discarding unused items. This attribute is application-dependent. The application must specify a threshold for unused items.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) unsignedInt datatype. |
| optimizeMemory (Optimize Cache for Memory) | Specifies a boolean value that indicates whether the application will apply optimizations to the cache to reduce memory usage. This attribute is application-dependent. This application must define its own cache optimization methods. The application must also decide whether to expose cache optimization status via the user interface or an object model.  A value of on, 1, or true indicates the application will apply optimizations to the cache.  A value of off, 0, or false indicates the application will not apply optimizations to the cache.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| recordCount (PivotCache Record Count) | Specifies the number of records in the cache.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) unsignedInt datatype. |
| refreshedBy (Last Refreshed By) | Specifies the name of the end-user who last refreshed the cache. This attribute is application-dependent and is specified by applications that track and store the identity of the current user. This attribute also depends on whether the application exposes mechanisms via the user interface whereby the end-user can refresh the cache.  The possible values for this attribute are defined by the [ST\_Xstring](ST_Xstring.docx) simple type (§). |
| refreshedDate (PivotCache Last Refreshed Date) | Specifies the date when the cache was last refreshed. This attribute depends on whether the application exposes mechanisms via the user interface whereby the end-user can refresh the cache.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) double datatype. |
| refreshedVersion (PivotCache Last Refreshed Version) | Specifies the version of the application that last refreshed the cache. This attribute depends on whether the application exposes mechanisms via the user interface whereby the end-user can refresh the cache.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) unsignedByte datatype. |
| refreshOnLoad (Refresh On Load) | Specifies a boolean value that indicates whether the application will refresh the cache when the [workbook](workbook.docx) has been opened.  A value of on, 1, or true indicates that application will refresh the cache when the [workbook](workbook.docx) is loaded.  A value of off, 0, or false indicates the application will not automatically refresh cached data. The end user must trigger refresh of the cache manually via the application user interface.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| saveData (Save Pivot Records) | Specifies a boolean value that indicates whether the pivot records are saved with the cache.  A value of on, 1, or true indicates pivot records are saved in the cache.  A value of off, 0, or false indicates are not saved in the cache.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| supportAdvancedDrill (Supports Attribute Drilldown) | Specifies whether the cache's data source supports attribute drilldown.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| supportSubquery (Supports Subqueries) | Specifies whether the cache's data source supports subqueries.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| [tupleCache](tupleCache.docx) (Stores Cache for OLAP Functions) | Specifies a boolean value that indicates whether the PivotCache is used store information for OLAP [sheet](sheet.docx) data functions.  A value of on, 1, or true indicates information about OLAP [sheet](sheet.docx) data functions are stored in the cache.  A value of off, 0, or false indicates the PivotCache does not contain information about OLAP [sheet](sheet.docx) data functions.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| upgradeOnRefresh (Upgrade PivotCache on Refresh) | Specifies a boolean value that indicates whether the cache is scheduled for version upgrade. This attribute depends on whether the application exposes mechanisms via the user interface whereby the cache may be upgraded.  A value of on, 1, or true indicates the cache is scheduled for upgrade.  A value of off, 0, or false indicates the cache is not scheduled for upgrade.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |

The following XML [Schema](Schema.docx) fragment defines the contents of this element:

<complexType [name](name.docx)="CT\_PivotCacheDefinition">

<sequence>

<element name="[cacheSource](cacheSource.docx)" type="CT\_CacheSource" minOccurs="1" maxOccurs="1"/>

<element name="[cacheFields](cacheFields.docx)" type="CT\_CacheFields" minOccurs="1" maxOccurs="1"/>

<element [name](name.docx)="[cacheHierarchies](cacheHierarchies.docx)" minOccurs="0" type="CT\_CacheHierarchies"/>

<element [name](name.docx)="[kpis](kpis.docx)" minOccurs="0" type="CT\_PCDKPIs"/>

<element [name](name.docx)="[tupleCache](tupleCache.docx)" minOccurs="0" type="CT\_TupleCache"/>

<element [name](name.docx)="[calculatedItems](calculatedItems.docx)" minOccurs="0" type="CT\_CalculatedItems"/>

<element [name](name.docx)="[calculatedMembers](calculatedMembers.docx)" type="CT\_CalculatedMembers" minOccurs="0"/>

<element [name](name.docx)="[dimensions](dimensions.docx)" type="CT\_Dimensions" minOccurs="0"/>

<element [name](name.docx)="[measureGroups](measureGroups.docx)" type="CT\_MeasureGroups" minOccurs="0"/>

<element [name](name.docx)="[maps](maps.docx)" type="CT\_MeasureDimensionMaps" minOccurs="0"/>

<element [name](name.docx)="[extLst](extLst.docx)" minOccurs="0" type="CT\_ExtensionList"/>

</sequence>

<attribute ref="r:id" use="optional"/>

<attribute name="invalid" type="xsd:boolean" use="optional" default="false"/>

<attribute name="saveData" type="xsd:boolean" use="optional" default="true"/>

<attribute name="refreshOnLoad" type="xsd:boolean" use="optional" default="false"/>

<attribute name="optimizeMemory" type="xsd:boolean" use="optional" default="false"/>

<attribute name="enableRefresh" type="xsd:boolean" use="optional" default="true"/>

<attribute [name](name.docx)="refreshedBy" type="[ST\_Xstring](ST_Xstring.docx)" use="optional"/>

<attribute [name](name.docx)="refreshedDate" type="xsd:double" use="optional"/>

<attribute [name](name.docx)="backgroundQuery" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="missingItemsLimit" type="xsd:unsignedInt" use="optional"/>

<attribute name="createdVersion" type="xsd:unsignedByte" use="optional" default="0"/>

<attribute name="refreshedVersion" type="xsd:unsignedByte" use="optional" default="0"/>

<attribute name="minRefreshableVersion" type="xsd:unsignedByte" use="optional" default="0"/>

<attribute [name](name.docx)="recordCount" type="xsd:unsignedInt" use="optional"/>

<attribute name="upgradeOnRefresh" type="xsd:boolean" use="optional" default="false"/>

<attribute name="[tupleCache](tupleCache.docx)" type="xsd:boolean" use="optional" default="false"/>

<attribute name="supportSubquery" type="xsd:boolean" use="optional" default="false"/>

<attribute name="supportAdvancedDrill" type="xsd:boolean" use="optional" default="false"/>

</complexType>