

Assembly

Part which is an Assembly and Part which is a Component, and of course Part which is both. Part comprises Component. Part is consumed in Assembly. This is the standard Bill of Materials configuration for Relational databases.

Column	Key	Datatype	Definition
AssemblyId	PK	ObjectId	Primary Key of Part, which is an Assembly, a specific Role of an PartId
ComponentId	PK	ObjectId	Primary Key of each part, which is a Component in the AssemblyId, a specific Role of an PartId
Quantity		_IntSmall	The number of units of Component that are required to assemble the Assembly
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE CLUSTERED INDEX UC_PK ON (AssemblyId, ComponentId) ON data_seg	Ensure Primary Key is Unique Clustered for grouping and distribution
U__AK	AK	CREATE UNIQUE NONCLUSTERED INDEX U__AK ON (ComponentId, AssemblyId) ON NCI_seg	For search by ComponentId Unique to comply with SG Standard

Asset

object is an Asset. Note the distinction between this (a discrete asset, eg. table or chair; not an auditable item) and AssetItem (an auditable item),

Column	Key	Datatype	Definition
AssetId	PK FK	ObjectId	Primary Key of Asset, a specific Role of an objectId
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE CLUSTERED INDEX UC_PK ON Asset(AssetId) ON data_seg	Ensure Primary Key is Unique Clustered due to no other index
Asset_Excl_ck	CK	CHECK (dbo. ValidateExclusiveObject_fn (AssetId, "A") = 1)	Ensure that object (Base) is an Asset (Subtype)

AssetItem

A single occurrence of an Asset, an auditable item, that appears in the internal inventory,

Column	Key	Datatype	Definition
AssetId	PK FK	ObjectId	Primary Key of Asset, AssetItem
Itemno	PK	Itemno	Primary Key of AssetItem
PurchaseDate		_Date	Original date of purchase
PurchasePrice		_MoneySmall	Original price paid
ModifiedDate		_TimeStampSmall	Audit requirement. Standard for Optimistic Locking
ModifiedUser		_UserStamp	Audit requirement
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE CLUSTERED INDEX UC_PK ON AssetItem(AssetId, ItemNo) ON data_seg	Ensure Primary Key is Unique Clustered due to no other index

AssetSerial

Optional columns for AssetItem, Lathes have serial numbers; chairs do not. Valuable AssetItems that do not have a serial number provided by the manufacturer can be assigned an internal one.

Column	Key	Datatype	Definition
AssetId	PK FK	ObjectId	Primary Key of Asset, AssetItem, AssetSerial
Itemno	PK FK	Itemno	Primary Key of AssetItem, AssetSerial
SerialNo	AK	SerialNo	Serial number of the AssetItem. The AK status prevents duplicate entries.
IsInscribed		_Indicator	Indicates if the serial number is inscribed on the AssetItem
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE CLUSTERED INDEX UC_PK ON AssetSerial(AssetId, ItemNo) ON data_seg	Ensure Primary Key is Unique Clustered for grouping and distribution
U__AK	AK	CREATE UNIQUE NONCLUSTERED INDEX U__AK ON AssetSerial(SerialNo) ON NCI_seg	Ensure Alternate Key is Unique

Keyword

keyword describes object. A word that is used to formally describe an object. Placed in a table so as to restrict the otherwise loose use of words in such descriptions.

Column	Key	Datatype	Definition
Keyword	PK	Keyword	Primary Key of Keyword
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE CLUSTERED INDEX UC_PK ON Keyword(Keyword) ON ref_seg	Ensure Primary Key is Unique Clustered due to no other index

Object

Identifies the `object` (`Asset` or `Part`) that the corporation record, for the purpose of maintaining an inventory of `Asset` (for audit) and `Part` (for manufacture and sale). Base for the Subtypes: `Object` is a {`Asset`|`Part`}

Column	Key	Datatype	Definition
ObjectId	PK	ObjectId	<ul style="list-style-type: none"> Primary Key for <code>Object</code> A surrogate for <code>Name</code>
ObjectTypeCode	FK	ObjectTypeCode	Discriminator for <code>object</code> Subtype; identifies which Exclusive Subtype is used for each <code>object</code> row.
Name	AK	_Description	<ul style="list-style-type: none"> Terse description of the <code>Object</code>. The long description is available in <code>object_v.Description</code>. The genuine Key for the row, which neither narrow nor stable enough to be a PK, thus usurped by the surrogate
IsObsolete		_Indicator	Standard method for providing soft deletes. Populate drop-downs with rows where this is false.
CreatedDate		_TimeStampSmall	Audit requirement
ModifiedDate		_TimeStampSmall	Audit requirement. Standard for Optimistic Locking
ModifiedUser		_UserStamp	Audit requirement
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE NONCLUSTERED INDEX U_PK ON Object(ObjectId) ON NCI_seg	Ensure Primary Key is Unique
U__AK	AK	CREATE UNIQUE CLUSTERED INDEX UC_AK ON Object(Name) ON data_seg	Ensure Alternate Key is Unique Clustered for distribution

ObjectDescription

keyword describes `object`. `Object` is described as `keyword`. Formal description of an `Object`, using `keyword`.

Column	Key	Datatype	Definition
ObjectId	PK FK	ObjectId	Primary Key of <code>object</code> being described, <code>ObjectDescription</code> References <code>object</code>
Sequence	PK	_IntTiny	Primary Key, sequence of <code>keyword</code> used in the description
Keyword	PK FK	Keyword	Primary Key of <code>keyword</code> used in the description, <code>ObjectDescription</code> References <code>keyword</code>
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE CLUSTERED INDEX UC_PK ON ObjectDescription(ObjectId, Sequence, Keyword) ON data_seg	Ensure Primary Key is Unique Clustered for grouping and distribution
U__AK	AK	CREATE UNIQUE NONCLUSTERED INDEX U__AK ON ObjectDescription(Keyword, ObjectId) ON NCI_seg	Prevent duplication <code>object::keyword</code> combination Provide speed for <code>object</code> lookup via <code>keyword</code>

ObjectType

`ObjectType` classifies `object`

Column	Key	Datatype	Definition
ObjectTypeCode	PK	ObjectTypeCode	Primary Key for <code>ObjectType</code> . Code, identifying the type of <code>object</code>
Name	AK	_Description	Describes the <code>objectType</code>
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE CLUSTERED INDEX UC_PK ON ObjectType(ObjectTypeCode) ON ref_seg	Ensure Primary Key is Unique Clustered due to no other index

Part

`object` is a `Part`. It is used for manufacture of other `parts`, and for sale. This inventory is merchandise, and thus tracked precisely.

Column	Key	Datatype	Definition
PartId	PK FK	ObjectId	Primary Key for <code>Part</code> , a specific Role of an <code>objectId</code>
UnitsPerQty		_IntTiny	The number of Units in a package, as merchandised (not as received)
Price		_IntSmall	Serial number of the <code>AssetItem</code> . The <code>AK</code> status prevents duplicate <code>AssetItem</code> entries.
Constraint	Typ	Declaration	Definition
UC_PK	PK	CREATE UNIQUE CLUSTERED INDEX UC_PK ON Part(PartId) ON data_seg	Ensure Primary Key is Unique Clustered due to no other index
Part_Excl_ck	Ck	CHECK (dbo. ValidateExclusiveObject_fn (PartId, "P") = 1)	Ensure that <code>object</code> (Base) is an <code>Part</code> (Subtype)