

Advanced Database Management Independent Research

# Asset Tracker Database Documentation

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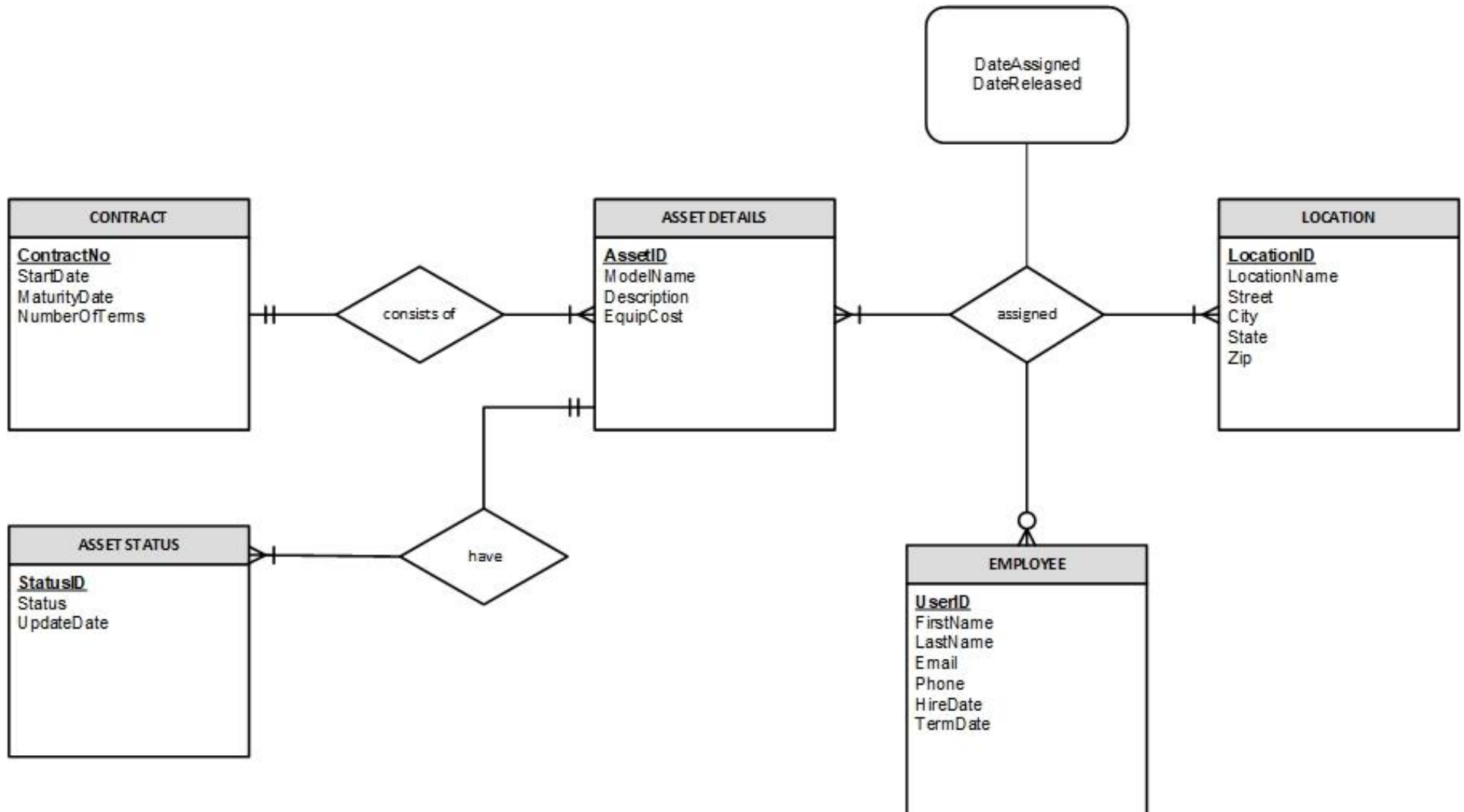
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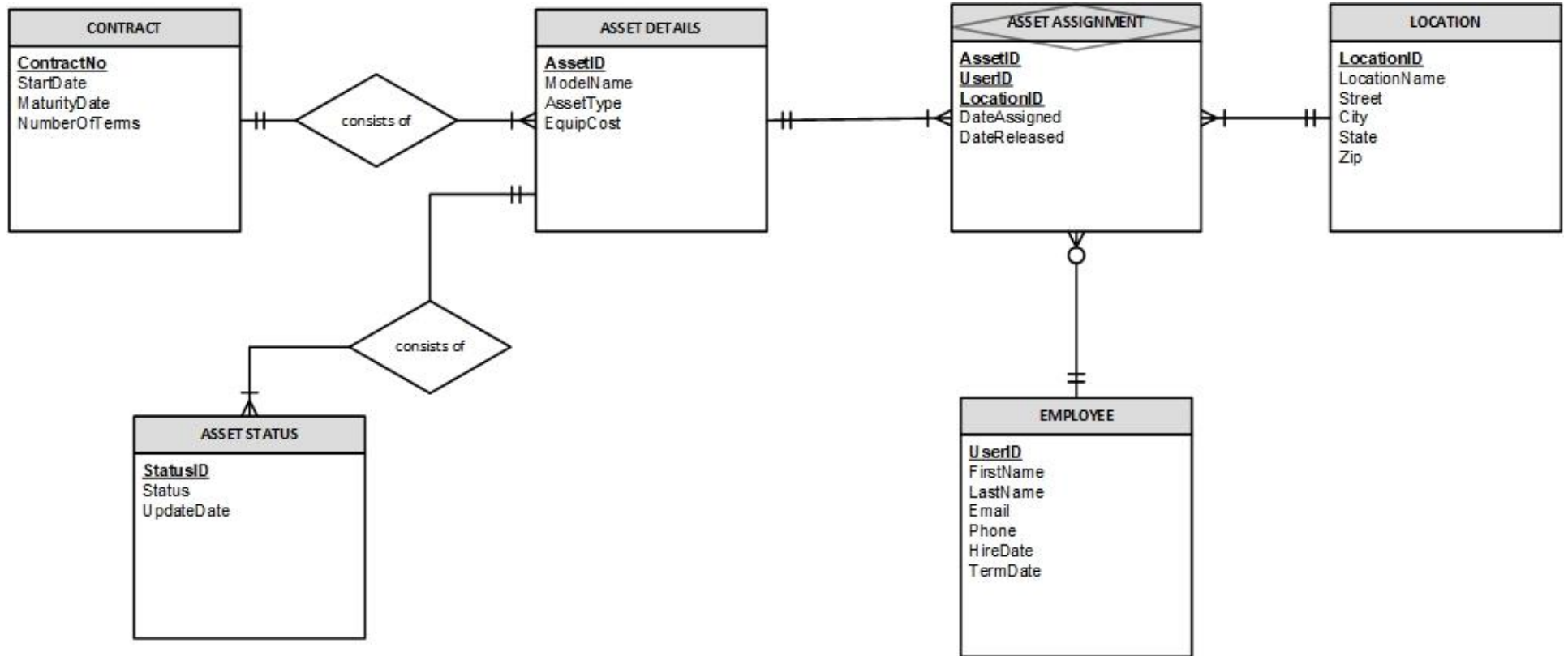
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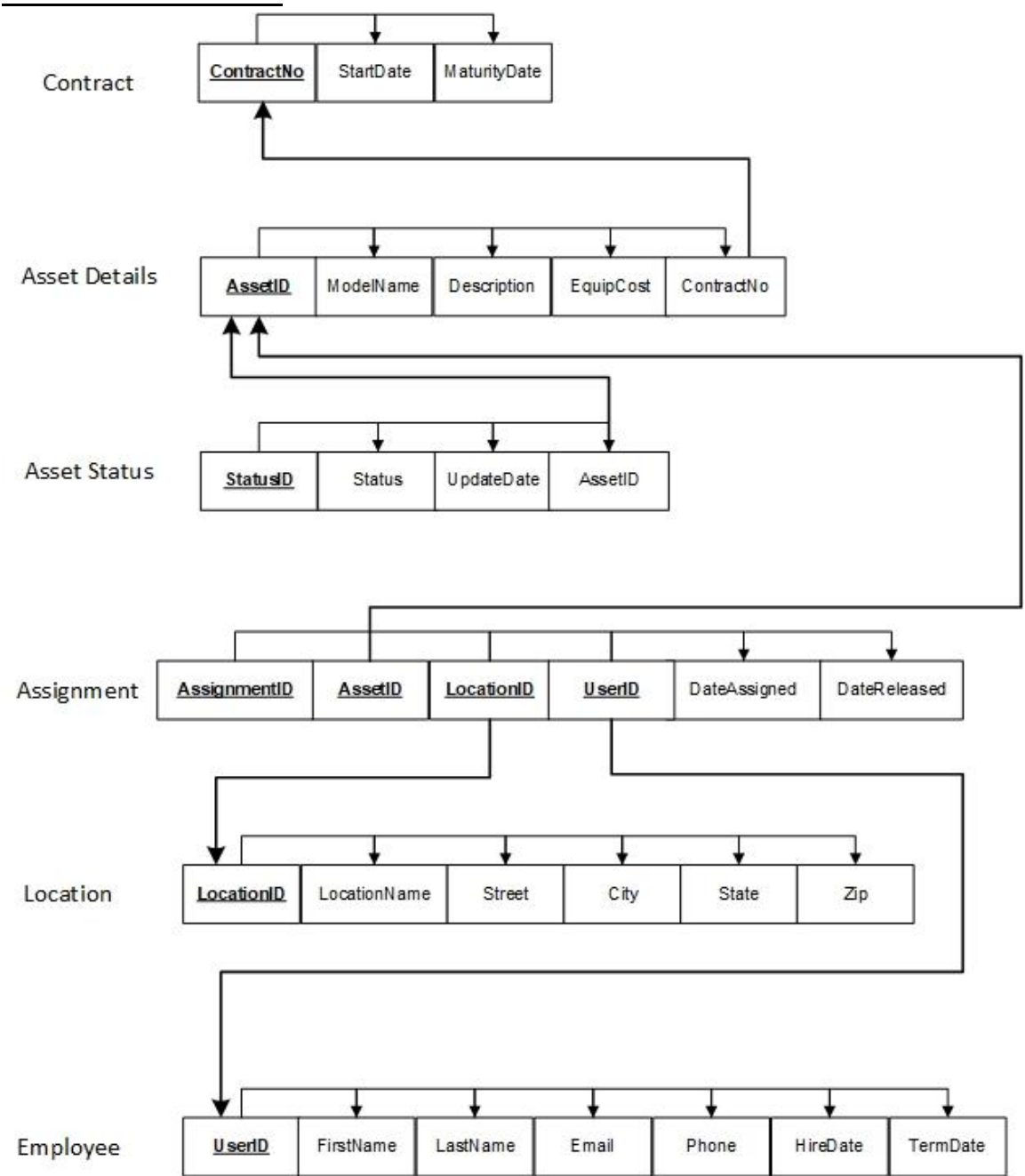
## Entity Relationship Diagram



## Enhanced Entity Relationship Diagram



Relational Schema



## Data Dictionary Summary

Contract (ContractNo, StartDate, MaturityDate, NumberOfTerms)

AssetDetails (AssetID, ModelName, Description, EquipCost, ContractNo)

AssetStatus (StatusID, Status, UpdateDate, AssetID)

Assignment (AssignmentID, AssetID, LocationID, UserID, DateAssigned, DateReleased)

Location (LocationID, LocationName, Street, City, State, Zip)

Employee (UserID, FirstName, LastName, Email, Phone, HireDate, TermDate)

## Data Dictionary

Table: AssetDetails

Column Name	Description	Data Type	Size	Identity	Unique	Default	Check	Allow Nulls	Index
AssetID	<b>PK</b> ; Asset unique identifier	int							Y
ModelName	Model Name of Asset	nvarchar	30						
Description	Laptop or Desktop	nvarchar	8						
EquipCost	Original cost of Asset	smallint							
ContractNo	<b>FK</b> to Contract table; Contract # the Asset	int							

Table: AssetStatus

Column Name	Description	Data Type	Size	Identity	Unique	Default	Check	Allow Nulls	Index
StatusID	<b>PK</b> ; Status unique identifier	int		Y					Y
AssetID	<b>FK</b> to AssetDetails table; Asset identifier	int							Y
Status	Lifecycle Status of Asset	nvarchar	15						
UpdateDate	Lifecycle Status Date Change	date							

Table: AssetAssignment

Column Name	Description	Data Type	Size	Identity	Unique	Default	Check	Allow Nulls	Index
AssignmentID	<b>PK</b> ; Unique sequential placeholder	int		Y					Y
AssetID	<b>CPK</b> ; <b>FK</b> to Asset table	int							Y
LocationID	<b>CPK</b> ; <b>FK</b> to Location table	smallint						Y	Y
UserID	<b>CPK</b> ; <b>FK</b> to Employee table	nvarchar	15						Y
DateAssigned	Start date of Lifecycle Status	date				GETDATE()			
DateReleased	End Date of Lifecycle Status	date					>= StartDate	Y	

Table: Contract

Column Name	Description	Data Type	Size	Identity	Unique	Default	Check	Allow Nulls	Index
ContractNo	<b>PK</b> ; Unique Contract Number	int							Y
StartDate	Contract Start Date	datetime				GETDATE()		Y	
MaturityDate	Contract End/Maturity Date	datetime					>= StartDate	Y	

Table: Employee

Column Name	Description	Data Type	Size	Identity	Unique	Default	Check	Allow Nulls	Index
UserID	<b>PK</b> ; Unique Employee Identifier	nvarchar	15						Y
FirstName	Employee's First Name	nvarchar	15						
LastName	Employee's Last Name	nvarchar	25						
Email	Employee's Email	nvarchar	25						
Phone	Employee's Phone Number	varchar	14						
HireDate	Employee Hire Date	datetime				GETDATE()			
TermDate	Employee Termination Date	datetime					>= HireDate	Y	

Table: Location

Column Name	Description	Data Type	Size	Identity	Unique	Default	Check	Allow Nulls	Index
LocationID	<b>PK</b> ; Unique Location Identifier	smallint							Y
LocationName	Name of Location	nvarchar	50						Y
Street	Location's Street Name	nvarchar	25						
City	Location's City Name	nvarchar	15						
State	Location's State Name	char	2				LIKE [A-Z][A-Z]		
Zip	Location's Zip code	char	5				LIKE [0-9] [0-9] [0-9] [0-9] [0-9]		



# Asset Tracker Schema

