Service Company Database Plan

#### Andrew Yeager

Plan for Service Company Database to handle Scheduling and Employee Management. All table names and Field names etc contain spaces that should be removed for setup and database creation.

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| --- | --- | --- |
| Table Name | | |
| *Field Name* | *Data type* | *Constraints, indexes, foreign keys, etc…* |

# Schema = DBO

|  |  |  |
| --- | --- | --- |
| Phone Type LKP | | |
| Phone Type ID | Int, PK, identity, nn |  |
| Name | Varchar(20), nn |  |
| Active | bit |  |

|  |  |  |
| --- | --- | --- |
| Address Type LKP | | |
| Address Type ID | Int, PK, identity, nn |  |
| Name | Varchar(20), nn |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Email Type LKP | | |
| Email Type ID | Int, PK, identity, nn |  |
| Name | Varchar(20), nn |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Relationship Lkp | | |
| Relationship ID | Int, PK, identity, nn |  |
| Name | Varchar(20), nn |  |
| Active | Bit, null |  |

# Schema = Company

|  |  |  |
| --- | --- | --- |
| Company Info | | |
| Company ID | Int, PK, nn |  |
| LegalName | Varchar(50), null |  |
| DBAName | Varchar(50), null |  |
| Logo | Varbinary(max), null |  |

|  |  |  |
| --- | --- | --- |
| Company Branch | | |
| Co Branch ID | Int, PK, nn |  |
| Company ID | Int, null | FK (Company Info) |
| Branch Name | Varchar(50), nn |  |
| Branch Type | Varchar(25), null |  |
| Open Date | Date null |  |
| Close Date | Date null |  |

|  |  |  |
| --- | --- | --- |
| Company Department | | |
| Department ID | Int, PK, nm |  |
| Branch ID | Int, PK, nn |  |
| Company ID | Int, null | FK (Company Info) |
| Department Name | Varchar(50), nn |  |
|  |  |  |
| Branch Type | Varchar(25), null |  |
| Close Date | Date |  |

|  |  |  |
| --- | --- | --- |
| Company Address | | |
| Co Address ID | Int, Identity key, nn |  |
| Co Branch ID | Int, nn | FK (branch info) |
| Address Type ID | Int, null | FK (Address Type ID) |
| Address | Varchar(50), null |  |
| Address 2 | Varchar(50), null |  |
| City | Varchar(25), null |  |
| State | Varchar(25), null |  |
| Zip | Varchar(12), null |  |
| Active | Bit |  |

|  |  |  |
| --- | --- | --- |
| Company Phone | | |
| Co Phone ID | Int, Identity key, nn |  |
| Co Branch ID | Int, nn | FK (branch info) |
| Phone Type ID | Int, null | FK (PhoneType lookup) |
| Phone Number | Varchar(12), null |  |
| Active | Bit |  |

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| --- | --- | --- |
| Services (lookup) | | |
| Service ID | Int, Identity, nn |  |
| Name | Varchar(50), nn |  |
| Description | Varchar(150), null |  |

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| --- | --- | --- |
| Services Offered | | |
| Row ID | Int, Identity key, nn |  |
| Branch ID | Int, nn | FK (branch info) |
| Service ID | Varchar(25), null | FK (Services) |
| Start Date | Date, null |  |
| End Date | Date, null |  |

# Schema = Customer

|  |  |  |
| --- | --- | --- |
| Customer Info | | |
| Customer ID | Int, PK, nn |  |
| Business Name | Varchar(40), null |  |
| First Name | Varchar(25), null |  |
| Last Name | Varchar(30), null |  |
| Middle Name | Varchar(25), null |  |
| Customer Type | Int, null | FK (Customer Type Lkp) |
| Row Constraint : Must have value for either Business Name or First Name and Last Name | | |

|  |  |  |
| --- | --- | --- |
| Customer Type (lookup) | | |
| Type ID | Int, Identity, nn |  |
| Name | Varchar(40), nn |  |
| Description | Varchar(120), null |  |

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| --- | --- | --- |
| Customer Address | | |
| Cu Address ID | Int, Identity, nn |  |
| Customer ID | Int, nn |  |
| Cu Branch ID | Int, null |  |
| Address Type ID | Int, null |  |
| Address | Varchar(70), null |  |
| Address 2 | Varchar(30), null |  |
| City | Varchar(30), null |  |
| State | Char(2), null |  |
| Zip | Varchar(12), null |  |
| Notes | Varchar(Max), null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Customer Phone | | |
| Cu Phone ID | Int, Identity, nn |  |
| Customer ID | Int, nn |  |
| Cu Branch ID | Int, null |  |
| Cu Contact ID | Int, null | FK (Customer Person) |
| Phone Type ID | Int, null |  |
| Phone Number | Varchar(15), nn |  |
| Notes | Varchar(Max), null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Customer Contact | | |
| Cu Contact ID | Int, Identity, nn |  |
| Customer ID | Int, null |  |
| Cu Branch ID | Int, null |  |
| First Name | Varchar(25), nn |  |
| Last Name | Varchar(30), nn |  |
| Title | Varchar(30), null |  |
| Notes | Varchar(Max), null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Customer Email | | |
| Cu Email ID | Int, Identity, nn |  |
| Customer ID | Int, null |  |
| Cu Contact ID | Int, null | FK (CustomerContact.CuContactID) |
| Email Type ID | Int, null |  |
| Email | Varchar(15), nn |  |
| Notes | Varchar(Max), null |  |
| Active | Bit, null |  |

# Schema = Employee

|  |  |  |
| --- | --- | --- |
| Employee Info | | |
| Employee ID | Int, PK, nn |  |
| Company ID | Int, nn |  |
| First Name | Varchar(25), null |  |
| Last Name | Varchar(30), null |  |
| Middle Name | Varchar(25), null |  |
| Employee Type | Varchar(15), null | Value Constraint = Full Time or Part Time |
| Employee Photo | Varbinary(max), null |  |

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| --- | --- | --- |
| Employee Details | | |
| Employee ID | Int, PK, nn |  |
| SSN | Char(9), null |  |
| Birth Date | Date, null |  |

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| --- | --- | --- |
| Employment Details | | |
| Row ID | Int, Identity, nn |  |
| Employee ID | Int, nn |  |
| Start Date | Date, nn |  |
| Termination Date | Date, null |  |
| Termination Type | Varchar(30), null |  |
| Termination Notes | Varchar(Max),null |  |
| Rehire Eligible | Bit, null |  |

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| --- | --- | --- |
| Employee Address | | |
| Emp Address ID | Int, Identity, nn |  |
| Emp ID | Int, nn |  |
| Address Type ID | Int, null |  |
| Address | Varchar(70), null |  |
| Address 2 | Varchar(30), null |  |
| City | Varchar(30), null |  |
| State | Char(2), null |  |
| Zipcode | Varchar(12), null |  |
| Notes | Varchar(Max), null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Employee Phone | | |
| Emp Phone ID | Int, Identity, nn |  |
| Employee ID | Int, nn |  |
| Phone Type ID | Int, null |  |
| Phone Number | Varchar(15), nn |  |
| Notes | Varchar(Max), null |  |
| Primary | Bit, null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Employee Email | | |
| Emp Email ID | Int, Identity, nn |  |
| Employee ID | Int, nn |  |
| Email Type ID | Int, null |  |
| Email | Varchar(40), nn |  |
| Notes | Varchar(Max), null |  |
| Default | Bit, null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Position lkp | | |
| Position ID | Int, Identity, nn |  |
| Title | Varchar(30), not null |  |
| Short Description | Varchar(140), null |  |
| Job Description | Varbinary(max), null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Pay And Position | | |
| Row ID | Int, Identity, nn |  |
| Employee ID | Int, nn |  |
| Start Date | Date, nn |  |
| End Date | Date, null |  |
| Position ID | Int, null | FK (Employee.PositionLkp.PositionID) |
| Reports To | Int, null | FK (Employee.EmployeeInfo . Employee ID) |
| Pay Type | Int, null |  |
| Pay Frequency | Varchar(25), null |  |
| Pay Amount | Small money, null |  |

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| --- | --- | --- |
| Licenses Certs | | |
| Row ID | Int, Identity, nn |  |
| Employee ID | Int, nn | FK (Employee.EmployeeInfo.EmployeeID) |
| Cert ID | Int, nn | FK (Employee.LicensesCertsLkp.CertID) |
| Emp Cert Num | Varchar(30), null |  |
| Issue Date | Date, null |  |
| Expire Date | Date, null |  |

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| --- | --- | --- |
| Licenses Certs Lkp | | |
| Cert ID | Int, Identity, nn |  |
| Name | Varchar(30), nn |  |
| Issue Authority | Varchar(70), null |  |
| Description | Varchar(120), null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Emergency Contact | | |
| Row ID | Int, Identity, nn |  |
| Employee ID | Int, nn | FK (Employee.EmployeeInfo.EmployeeID) |
| First Name | VarChar(25), null |  |
| Last Name | VarChar(30), null |  |
| RelationshipID | Int, null | FK (dbo.RelationshipLkp.RelationshipID) |
| Primary Phone | Varchar(20), null |  |
| Secondary Phone | Varchar(20), null |  |
| Active | Bit, null |  |

# Schema = Jobs

|  |  |  |
| --- | --- | --- |
| Job Info | | |
| Job ID | Int, Identity, nn |  |
| Job Name | Varchar(40), null |  |
| Customer ID | Int, nn, FK |  |
| JobTypeID | Int, nn, FK |  |
| Address | Varchar(40) null |  |
| Address 2 | VarChar(40)null |  |
| City | Varchar(20), null |  |
| State | Char(2), null |  |
| Zip | Char(5), null |  |
| County | Varchar(30), null |  |
| Subdivision ID | Int, null, FK |  |
| Legal Lot | Varchar(25), null |  |
| Permit Auth ID | Int, null, FK |  |
| Permit Number | Varchar(30), null |  |

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| --- | --- | --- |
| Job Details | | |
| RowID | Int, Identity, nn |  |
| JobID | Int, FK, NN |  |
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| --- | --- | --- |
| Job Equipment | | |
| RowID | Int, Identity, nn |  |
| JobID | Int, FK, nn |  |
| EquipmentID | Int, nn, FK |  |
| Location | Int, nn, FK |  |
| SerialNumber | Varchar(40) null |  |
| WorkOrderID | VarChar(40)null |  |
| Notes | Varchar(20), null |  |

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| --- | --- | --- |
| Job Type Lkp | | |
| Job Type ID | Int, Identity, nn |  |
| Name | Varchar(30), nn |  |
| Description | Varchar(120), null |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Subdivision Lkp | | |
| Subdivision ID | Int, Identity, nn |  |
| Name | Varchar(30), nn |  |
| Description | Varchar(120), null |  |
| Permit Authority ID | Int, nn |  |
| Active | Bit, null |  |

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| --- | --- | --- |
| Permit Authority Lkp | | |
| Permit Authority ID | Int, Identity,PK, nn |  |
| Name | Varchar(30), nn |  |
| AuthType | Varchar(30), null | City, Water provider, County, Federal, State |
| Active | Bit, null |  |

# Schema = FlatRate

|  |  |  |
| --- | --- | --- |
| Tasks | | |
| Task ID | Int, Identity, nn |  |
| Group ID | Int, fk, null |  |
| Name | Varchar(30), nn |  |
| Invoice Description | Varchar(120), null |  |
| Extended Description | Varchar(500), null |  |
| Active | Bit, null |  |
| Create Date | DateTime, nn |  |
| Last Updated | DateTime, nn |  |
| Use Material Hours | bit, , null | Boolean use material hours |
| Labor Hours | Int, null | This stores data for an overridden labor hours |

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| --- | --- | --- |
| Task Group | | |
| Group ID | Int Identity, nn |  |
| Name | Varchar(40), nn |  |
| Description | Varchar(240) null |  |
| Notes | Varchar(500) null |  |

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| --- | --- | --- |
| Task Materials | | |
| Row ID | Int Identity, nn |  |
| Task ID | Int, fk, nn |  |
| Part ID | int,fk, nn |  |
| Qty | Int, null |  |

# Schema = Materials

|  |  |  |
| --- | --- | --- |
| Lkp Manufacturers | | |
| Manufacturer ID | Int Identity, nn |  |
| Name | Varchar(40), nn |  |

|  |  |  |
| --- | --- | --- |
| Lkp Material Atrribute | | |
| RowID | Int Identity, nn |  |
| Name | Varchar(40), nn |  |

|  |  |  |
| --- | --- | --- |
| Materials | | |
| Part ID | Int Identity, nn |  |
| Our Part Num | Varchar(25), nn |  |
| Manufacturer ID | Int, nn |  |
| Man Part Num | Varchar(25), null |  |
| Invoice Description | Varchar(40), nn |  |
| Extended Description | Varchar(120), null |  |
| Notes | text, null |  |
| UPC | Char(12), null |  |
| Last Updated | Timestamp, nn |  |

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| --- | --- | --- |
| Material Attributes | | |
| Part ID | Int PK, FK, nn |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| Material Pricing | | |
| Part ID | Int PK, FK, nn |  |
| Retail Price | money, null |  |
| Retail Discount | Decimal(1,4) null | This is a percent number where 1.0 = 100% |
| Override Sale Price | money, null |  |

Materials shall be classified according to specific attributes such as….

* Kind – pipe, fitting, fixture, fastener, install, repair
  + Material Class
    - Type
      * Sub type
    - Class
      * Sub class
    - Size
      * Size 1
      * Size 2
      * Size 3
      * Size 4