**Permissions Database Design**

**Key**

\* - Primary Key

# - Foreign Key

|  |  |
| --- | --- |
| **Role** | |
| **ID\*** | **Name** |
| 1 | Test Author |
| 2 | Test Approver |
| 3 | Test Kingpin |

|  |  |
| --- | --- |
| **Allowable Entity Type** | |
| **ID\*** | **Name** |
| 1 | Client |
| 2 | Group Of States |
| 3 | State |
| 4 | Group of Districts |
| 5 | District |
| 6 | Group of Institutions |
| 7 | Institutions |

|  |  |
| --- | --- |
| **Role Entity Mapping** | |
| **RID\*#** | **ETID\*#** |
| 1 | 1 |
| 1 | 3 |
| 2 | 1 |
| 2 | 3 |
| 3 | 1 |
| 3 | 3 |

|  |  |
| --- | --- |
| **Component** | |
| **ID\*** | **Name** |
| 1 | Test Authoring |
| 2 | Item Authoring |
| 3 | Test Delivery |

|  |  |
| --- | --- |
| **Permission** | |
| **ID\*** | **Name** |
| 1 | Author Tests |
| 2 | Approve Tests |
| 3 | Release Tests |

|  |  |
| --- | --- |
| **Component Permission Mapping** | |
| **CID\*#** | **PID\*#** |
| 1 | 1 |
| 1 | 2 |
| 1 | 3 |

|  |  |
| --- | --- |
| **Permissions Role Mapping** | |
| **RID\*#** | **PID\*#** |
| 1 | 1 |
| 2 | 1 |
| 2 | 2 |
| 3 | 1 |
| 3 | 2 |
| 3 | 3 |

**Schema**

**Role** (ID, Name)

**EntityType** (ID, Name)

**RoleEntity\_Map** (RID, ETID) – RID : Role (ID), ETID: EntityType (ID)

**Component** (ID, Name)

**Permission** (ID, Name)

**CompPerm\_Map** (CID, PID) – CID: Component(ID), PID: Permission(ID)

**PermRoleMap** ( RID, PID) – RID: Role(ID), PID: Permission(ID)