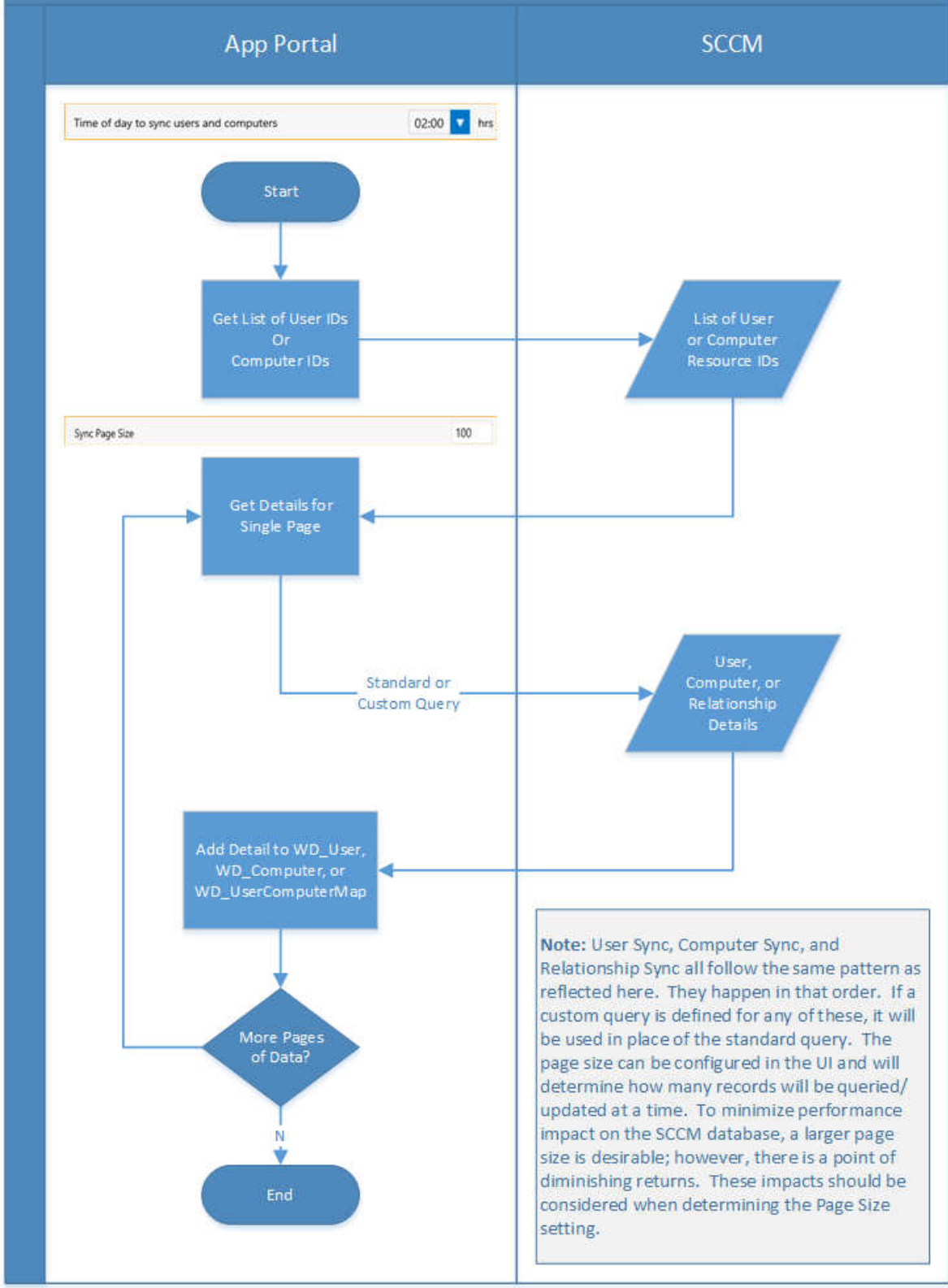# App Portal Integration with System Center Configuration Manager

App Portal will be integrated with System Center Configuration Manager (SCCM) to provide automated deployment or removal of packaged software upon request. The following workflow diagrams illustrate the interactions App Portal has with SCCM when syncing User/Computer/Relationship data, creating a new catalog item, and requesting a deployment (install/uninstall/repair).

Sync Users and Computers

App Portal	SCCM

Time of day to sync users and computers 02:00 ▼ hrs

Start

Get List of User IDs
Or
Computer IDs

List of User
or Computer
Resource IDs

Sync Page Size 100

Get Details for
Single Page

Standard or
Custom Query

User,
Computer, or
Relationship
Details

Add Detail to WD_User,
WD_Computer, or
WD_UserComputerMap

More Pages
of Data?

N

End

Note: User Sync, Computer Sync, and Relationship Sync all follow the same pattern as reflected here. They happen in that order. If a custom query is defined for any of these, it will be used in place of the standard query. The page size can be configured in the UI and will determine how many records will be queried/updated at a time. To minimize performance impact on the SCCM database, a larger page size is desirable; however, there is a point of diminishing returns. These impacts should be considered when determining the Page Size setting.

The standard queries for User, Computer, and Relationship synchronization are shown below:

User Sync Query

```sql
SELECT DISTINCT givenName0 AS FirstName, sn0 AS LastName, DisplayName0 as DisplayName,
    Network_Operating_System0 AS OS, physicalDeliveryOfficeNam0 AS Office, l0 as City,
    vru.postalCode0 as PostalCode, department0 AS Department, title0 AS Title,
    User_Name0 AS UserName, mail0 AS Email, manager0 AS Manager,
    vru.ResourceID AS UserResourceID, Distinguished_Name0 AS ADSPath,
    Full_User_Name0 AS FullName, Name0 AS Name, Unique_User_Name0 AS UniqueName,
    Windows_NT_Domain0 AS UserDomain, company0 AS Company, ra.User_OU_Name0 AS UserOU
FROM v_R_User AS vru
LEFT JOIN v_RA_User_UserOUName ra ON ra.ResourceID = vru.ResourceID
```
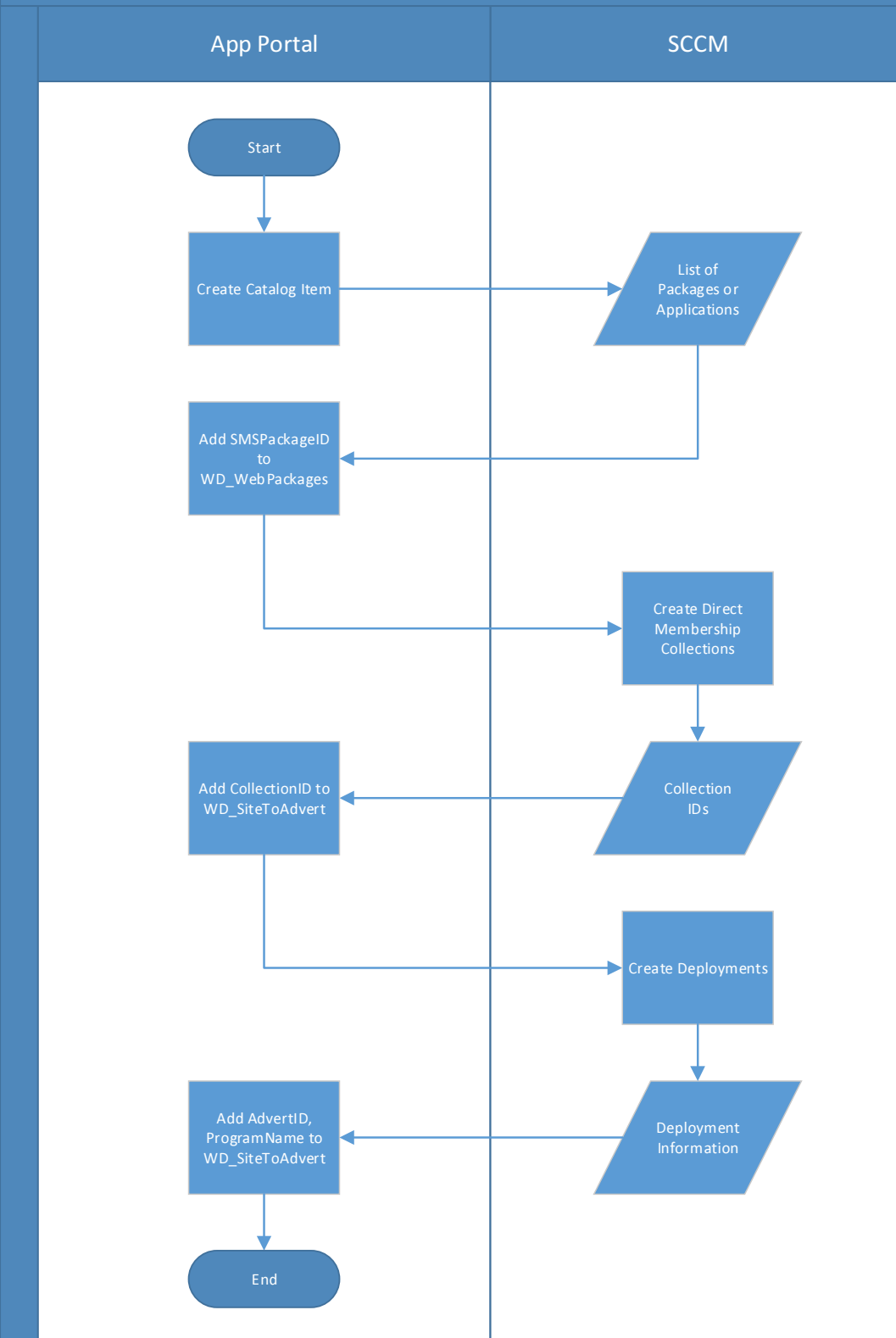
Computer Sync Query

```sql
SELECT DISTINCT vrs.ResourceID, Netbios_Name0 AS MachineName,
    User_Name0 AS SMSUserName, AD_Site_Name0 AS ADSite, Client0 AS Client,
    Active0 AS Active, Client_Type0 AS ClientType, Obsolete0 AS Obsolete,
    User_Domain0 AS UserDomain, Resource_Domain_OR_Workgr0 AS MachineDomain,
    ra.System_OU_Name0 AS SystemOU
FROM dbo.v_R_System vrs
LEFT JOIN v_RA_System_SystemOUName ra ON ra.ResourceID = vrs.ResourceID
```

User Computer Map Query

```sql
SELECT DISTINCT vrs.ResourceID, vru.Unique_User_Name0 AS UniqueName,
    vrs.Netbios_Name0 AS MachineName
FROM v_R_System vrs
INNER JOIN vUsersPrimaryMachines urm ON vrs.ResourceID = urm.MachineID
INNER JOIN v_R_User vru ON urm.UserResourceID = vru.ResourceID
```

Create Catalog Item

App Portal	SCCM

Start

Create Catalog Item → **List of Packages or Applications**

Add SMSPackageID to WD_WebPackages

Create Direct Membership Collections

Add CollectionID to WD_SiteToAdvert ← **Collection IDs**

Create Deployments

Add AdvertID, ProgramName to WD_SiteToAdvert ← **Deployment Information**

End

Request Deployment

App Portal	SCCM

App Portal:

Start

↓

Create Request in WD_PackageRequests and Populate WD_RequestTarget

↓

Has InsertDate been reached? — N

↓ Y

Check Deployment Result

↓

Deployment Complete? — N

↓ Y

Trigger Success/ Failure Events and Complete Request

↓

End

SCCM:

Add User or Computer to Target Collection

↓

Install/Uninstall/ Repair

↓

Deployment Result