

# [MS-UPASP]: User Profile Admin Stored Procedures Protocol Specification

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## Revision Summary

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08/28/2009	0.2	Editorial	Revised and edited the technical content
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# 1 Introduction

This document specifies User Profile Admin Stored Procedure Protocol Specification (UPASP). This protocol provides a way for the protocol client to interact with dedicated tenant-specific areas, called partitions, within a database that resides on the protocol server and contains properties that pertain to specific persons or entities.

Sections 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. Sections 1.5 and 1.9 are also normative but cannot contain those terms. All other sections and examples in this specification are informative.

## 1.1 Glossary

The following terms are defined in [\[MS-GLOS\]](#):

**access control list (ACL)**  
**Coordinated Universal Time (UTC)**  
**GUID**

The following terms are defined in [\[MS-OFCGLOS\]](#):

**audience**  
**back-end database server**  
**canonical URL**  
**partition**  
**personal site**  
**Really Simple Syndication (RSS)**  
**request identifier**  
**result set**  
**return code**  
**stored procedure**  
**Structured Query Language (SQL)**  
**Uniform Resource Identifier (URI)**  
**Uniform Resource Locator (URL)**  
**user profile**  
**user profile store**

The following terms are specific to this document:

**MAY, SHOULD, MUST, SHOULD NOT, MUST NOT:** These terms (in all caps) are used as described in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

## 1.2 References

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the technical documents, which are updated frequently. References to other documents include a publishing year when one is available.

### 1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com). We will assist you in finding the relevant information. Please check the archive site,

<http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[Iseminger] Microsoft Corporation, "SQL Server 2000 Architecture and XML/Internet Support", Volume 1 of Microsoft SQL Server 2000 Reference Library, Microsoft Press, 2001, ISBN 0-7356-1280-3, <http://www.microsoft.com/mspress/books/5001.aspx>

[MSDN-TSQL-Ref] Microsoft Corporation, "Transact-SQL Reference", [http://msdn.microsoft.com/en-us/library/ms189826\(SQL.90\).aspx](http://msdn.microsoft.com/en-us/library/ms189826(SQL.90).aspx)

[MS-TDS] Microsoft Corporation, "[Tabular Data Stream Protocol Specification](#)".

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.rfc-editor.org/rfc/rfc2119.txt>

[XMLSCHEMA1] Thompson, H.S., Ed., Beech, D., Ed., Maloney, M., Ed., and Mendelsohn, N., Ed., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/>

[XMLSCHEMA2] Biron, P.V., Ed. and Malhotra, A., Ed., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>

### 1.2.2 Informative References

[MS-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)".

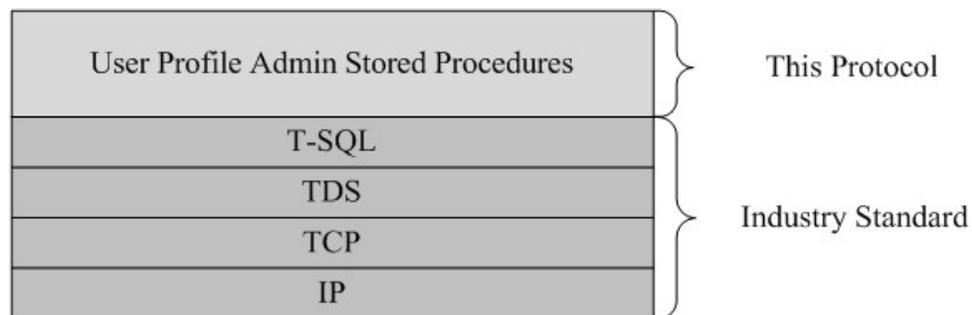
[MS-OFCGLOS] Microsoft Corporation, "[Microsoft Office Master Glossary](#)".

### 1.3 Protocol Overview (Synopsis)

This protocol provides a way for the protocol client to interact with **partitions (1)** in the **user profile store** on the respective protocol server. It enables protocol clients to create, delete or simply list partitions (1) in the user profile store. It also provides way for the protocol client to find out number of **user profiles**, number of **audiences** and number of partitions that exist in the user profile store. In addition, it also allows protocol clients to read or update property values for a partition (1) on the protocol server.

A protocol client may choose to implement a cache for property values associated with a partition (1). In the case when a protocol client has such caching mechanism, this protocol provides a way for maintaining a version number for the property values for a particular partition (1) on the protocol server to facilitate cache invalidation on protocol client.

### 1.4 Relationship to Other Protocols



## **Figure 1: This protocol in relation to other protocols**

### **1.5 Prerequisites/Preconditions**

The operations described by the protocol operate between a client and a **back-end database server** on which the databases are stored. The client is expected to know the location and connection information for the databases.

This protocol requires that the protocol client has appropriate permissions to call the **stored procedures** stored on the back-end database server.

### **1.6 Applicability Statement**

This protocol is designed to support a scale point of approximately:

- 1 partition (1) with 2 million user profiles
- 2 million partitions (1), each having 1 user profile
- Any other combination of number of partitions (1) and number of user profiles per partition (1), leading up to overall 2 million user profiles

### **1.7 Versioning and Capability Negotiation**

None.

### **1.8 Vendor-Extensible Fields**

None.

### **1.9 Standards Assignments**

None.

## 2 Messages

### 2.1 Transport

[\[MS-TDS\]](#) specifies the transport protocol, Tabular Data Stream (TDS) Protocol, used to call the stored procedures, query **SQL** tables, get **return codes**, and return **result sets** mentioned in this document.

### 2.2 Common Data Types

None.

#### 2.2.1 Simple Data Types and Enumerations

None.

#### 2.2.2 Bit Fields and Flag Structures

The bit fields and flag structures used in this specification are defined in this section.

##### 2.2.2.1 User Rights Flags

An 8-byte unsigned long bit mask that specifies the user rights. The only valid values of the User Rights Flags bits are as follows.

Value	Meaning
0x00	None
0x01	Manage <b>personal site</b>
0x02	Create personal site
0x04	Use social features
0x07	All

#### 2.2.3 Binary Structures

None.

#### 2.2.4 Result Sets

##### 2.2.4.1 Admin\_ListPartitions.ResultSet0

The **Admin\_ListPartitions.ResultSet0** result set contains the list of all partition (1) identifiers that are present in the [Tenants](#) table.

```
PartitionID uniqueidentifier,
```

**PartitionID:** A **GUID** identifying a partition (1) in the user profile store. MUST be a value from column PartitionID of table Tenants.

## 2.2.4.2 PartitionProperties

The **PartitionProperties** result set contains information corresponding to partitions in [Tenants](#) table.

```
PartitionID uniqueidentifier,  
CanonicalMySitePortalUrl nvarchar(2084),  
PreviousMySitePortalUrl nvarchar(2084),  
CanonicalSearchCenterUrl nvarchar(2084),  
PeopleResultsScope int,  
DocumentResultsScope int,  
DefaultRssFeed nvarchar(2084),  
MySiteEmailSenderName nvarchar(max),  
SynchronizationOU nvarchar(max),  
ProfileMasterCacheVersion int,  
DataCacheVersion int,  
SerializedUserAcl nvarchar(max),  
SecondaryMySiteOwner nvarchar(max),  
NewsFeedEnabled bit,  
LangPacksApplied nvarchar(max),
```

**PartitionID:** A GUID identifying the partition (1) in the user profile store. MUST be a value from column PartitionID of table Tenants.

**CanonicalMySitePortalUrl:** A string specifying the **canonical URL** for the partition's (1) my site portal. MUST be a value from column CanonicalMySitePortalUrl of table Tenants.

**PreviousMySitePortalUrl:** A string specifying the previous **URL** for the partition's (1) my site portal. MUST be a value from column PreviousMySitePortalUrl of table Tenants.

**CanonicalSearchCenterUrl:** A string specifying the canonical URL for the partition's (1) search center. MUST be a value from column CanonicalSearchCenterUrl of table Tenants.

**PeopleResultsScope:** An integer value specifying the scope for people search results. MUST be a value from column PeopleResultsScope of table Tenants.

**DocumentResultsScope:** An integer value specifying the scope for document search results. MUST be a value from column DocumentResultsScope of table Tenants.

**DefaultRssFeed:** A string specifying the default **RSS** feed URL. MUST be a value from column DefaultRssFeed of table Tenants.

**MySiteEmailSenderName:** A string specifying the sender e-mail address of my site e-mails. MUST be a value from column MySiteEmailSenderName of table Tenants.

**SynchronizationOU:** A string specifying the organizational unit of the partition (1) for synchronization. MUST be a value from column SynchronizationOU of table Tenants.

**ProfileMasterCacheVersion:** An integer value specifying the version number of the internal profile master cache. MUST receive a value from column ProfileMasterCacheVersion of table Tenants.

**DataCacheVersion:** An integer value specifying the version number of the internal data cache. MUST be a value from column DataCacheVersion of table Tenants.

**SerializedUserAcl:** A string specifying the serialized form of the user **access control list (ACL)** for the partition (1). MUST be a value from column SerializedUserAcl of table Tenants and MUST be a valid XML document instance of **acl** type defined in section [2.2.6.3.1](#).

**SecondaryMySiteOwner:** A string specifying the secondary my site owner. MUST be a value from column SecondaryMySiteOwner of table Tenants.

**NewsFeedEnabled:** A bit specifying whether or not the news feed is enabled. If the value is 1, the news feed MUST be enabled. If the value is 0, the news feed MUST be disabled. The value MUST NOT be NULL. MUST be a value from column NewsFeedEnabled of table Tenants.

**LangPacksApplied:** A string specifying the language packs whose localizations have been applied to the default (or built-in or standard or whatever terminology makes sense) user profile properties. MUST be a value from the LangPacksApplied column of table Tenants.

## 2.2.5 Tables and Views

### 2.2.5.1 Tenants

The **Tenants** table stores information about the partitions (1) in the user profile store.

```
PartitionID uniqueidentifier NOT NULL,  
LastModifiedTime datetime NOT NULL,  
CanonicalMySitePortalUrl nvarchar(2084) NOT NULL,  
PreviousMySitePortalUrl nvarchar(2084) NOT NULL,  
CanonicalSearchCenterUrl nvarchar(2084) NOT NULL,  
PeopleResultsScope int NOT NULL,  
DocumentResultsScope int NOT NULL,  
DefaultRssFeed nvarchar(2084) NOT NULL,  
MySiteEmailSenderName nvarchar(max) NULL,  
SynchronizationOU nvarchar(max) NULL,  
ProfileMasterCacheVersion int NOT NULL,  
SerializedUserAcl nvarchar(max) NULL,  
DataCacheVersion int NOT NULL,  
SecondaryMySiteOwner nvarchar(max) NULL,  
NewsFeedEnabled bit NOT NULL,  
LangPacksApplied nvarchar(max) NULL,
```

**PartitionID:** A GUID identifying the partition (1) in the user profile store. It is the @partitionID value supplied to [Admin\\_SetupPartition](#) stored procedure when the partition (1) was created.

**LastModifiedTime:** A time stamp in **UTC** format specifying the last time the partition properties were modified.

**CanonicalMySitePortalUrl:** A string specifying the canonical URL for the partition's (1) my site portal.

**PreviousMySitePortalUrl:** A string specifying the previous URL for the partition's (1) my site portal.

**CanonicalSearchCenterUrl:** A string specifying the canonical URL for the partition's (1) search center.

**PeopleResultsScope:** An integer value specifying the scope for people (user profile) search results.

**DocumentResultsScope:** An integer value specifying the scope for document search results.

**DefaultRssFeed:** A string specifying the default RSS feed URL.

**MySiteEmailSenderName:** A string specifying the sender e-mail address of my site e-mails.

**SynchronizationOU:** A string specifying the organizational unit of the partition (1) for synchronization.

**ProfileMasterCacheVersion:** An integer value specifying the version number of the internal profile master cache.

**SerializedUserAcl:** A string value representing an XML document specifying the serialized form of the user access control list (ACL) for the partition (1). This MUST be a valid XML document instance of **acl** type defined in section [2.2.6.3.1](#).

**DataCacheVersion:** An integer value specifying the version number of the internal data cache.

**SecondaryMySiteOwner:** A string specifying the secondary my site owner.

**NewsFeedEnabled:** A bit value specifying whether or not the news feed is enabled.

**LangPacksApplied:** A string specifying the language packs whose localizations have been applied to the default (or built-in or standard or whatever terminology makes sense) user profile properties.

## 2.2.6 XML Structures

The syntax of the definitions in this section uses XML Schema as defined in [\[XMLSCHEMA1\]](#) and [\[XMLSCHEMA2\]](#).

### 2.2.6.1 Namespaces

Prefix	Namespace URI	Reference
s	http://www.w3.org/2001/XMLSchema	<a href="#">[XMLSCHEMA1]</a> <a href="#">[XMLSCHEMA2]</a>

### 2.2.6.2 Simple Types

None.

### 2.2.6.3 Complex Types

The following table summarizes the set of common XML Schema complex type definitions defined by this specification.

Complex Type	Description
acl	Contains data about user access control list (ACL).

#### 2.2.6.3.1 acl

The **acl** type contains data about user access control entries.

```
<s:element name="acl">  
  <s:complexType>  
    <s:sequence>
```

```

<s:element name="ace" minOccurs="0" maxOccurs="unbounded">
  <s:complexType>
    <s:attribute name="identityName" type="s:string" use="required"/>
    <s:attribute name="displayName" type="s:string" use="required"/>
    <s:attribute name="sid" type="s:string" use="required"/>
    <s:attribute name="allowRights" type="s:unsignedLong" use="required"/>
    <s:attribute name="denyRights" type="s:unsignedLong" use="required"/>
  </s:complexType>
</s:element>
</s:sequence>
<s:attribute name="version" type="s:string" use="required"/>
</s:complexType>
</s:element>

```

**ace:** Contains an access control entry.

**ace.identityName:** A string specifying the name of the identity for the access control entry.

**ace.displayName:** A string specifying the display name for the access control entry.

**ace.sid:** Base64 encoded string representation of security identifier bytes.

**ace.allowRights:** An unsigned long specifying the rights to be granted. This MUST be a value from User Rights Flags (section [2.2.2.1](#)).

**ace.denyRights:** An unsigned long value specifying the rights to be denied. This MUST be a value from User Rights Flags (section [2.2.2.1](#)).

**version:** A string specifying the version of the **acl** type.

#### 2.2.6.4 Elements

None.

#### 2.2.6.5 Attributes

None.

#### 2.2.6.6 Groups

None.

#### 2.2.6.7 Attribute Groups

None.

## 3 Protocol Details

### 3.1 Server Details

The protocol server maintains information about partitions (1) in the user profile store and enables protocol clients to create, delete or simply list partitions (1) in the user profile store. In addition, it also allows protocol clients to read or update property values for a partition (1).

#### 3.1.1 Abstract Data Model

In case of this protocol, protocol server is expected to have a user profile store. Users in the user profile store can be divided into multiple partitions such that user in a partition (1) does not have access to user profile data belonging to users in another partition (1).

Each partition (1) within user profile store has metadata associated with it stored in the [Tenants](#) table.

#### 3.1.2 Timers

None.

#### 3.1.3 Initialization

Authentication of the TDS connection to the server must occur before this protocol can be used. The data structures, stored procedures, and actual data are persisted by the protocol server within databases, any operation to initialize the state of the database MUST occur before the server can use this protocol.

#### 3.1.4 Higher-Layer Triggered Events

None.

#### 3.1.5 Message Processing Events and Sequencing Rules

None.

##### 3.1.5.1 Admin\_DeletePartition

The **Admin\_DeletePartition** stored procedure is called to remove the data of a specific partition (1) from the user profile store.¶The T-SQL syntax for the stored procedure is as follows:

```
PROCEDURE Admin_DeletePartition (  
    @partitionID uniqueidentifier  
    ,@correlationId uniqueidentifier = null  
);
```

**@partitionID:** A GUID identifying the partition (1) to be deleted.

**@correlationId:** The optional **request identifier** for the current request.

**Return Values:** An integer which MUST be in the following table.

Value	Description
1	The specified partition (1) does not exist.
0	Successful execution.

**Result Sets:** MUST NOT return any result sets.

### 3.1.5.2 Admin\_GetPartitionProperties

The **Admin\_GetPartitionProperties** stored procedure is called to get the properties for partitions (1).¶The T-SQL syntax for the stored procedure is as follows:

```
PROCEDURE Admin_GetPartitionProperties (
  @top int = 1000
  ,@lastPartitionID uniqueidentifier = null
  ,@currentCachedTime datetime = null OUTPUT
  ,@correlationId uniqueidentifier = null
);
```

**@top:** An integer value specifying the maximum number of items in the returned result set. The value MUST be greater than 0.

**@lastPartitionID:** A GUID value representing a partition (1) identifier that is used for comparison in selecting the items in the returned result set. If the value is NULL, first @top items are returned in the result set from the [Tenants](#) table sorted in ascending PartitionID order. If the value is NOT NULL then the first @top items whose PartitionID is greater than the provided value are returned in the result set from the Tenants table sorted in ascending PartitionID order.

**@currentCachedTime:** A time stamp value in UTC format specifying the current time of the back-end database server. Any input value MUST be ignored.

**@correlationId:** The optional request identifier for the current request.

**Return Values:** An integer which MUST be 0.

**Result Sets:**

This stored procedure MUST return a [PartitionProperties](#)

### 3.1.5.3 Admin\_ListPartitions

The **Admin\_ListPartitions** stored procedure is called to retrieve the list of all partition (1) identifiers that are present in the [Tenants](#) table.¶The T-SQL syntax for the stored procedure is as follows:

```
PROCEDURE Admin_ListPartitions (
);
```

**Return Values:** An integer which MUST be 0.

**Result Sets:**

This stored procedure MUST return a [Admin\\_ListPartitions.ResultSet0](#)

### 3.1.5.4 Admin\_SetPartitionDataCacheVersion

The **Admin\_SetPartitionDataCacheVersion** stored procedure is called to set the version of the data cache of a specific partition (1). ¶If the version value in column DataCacheVersion in [Tenants](#) table matches the value in @oldDataCacheVersion, then the value in column DataCacheVersion is updated to the value specified in @newDataCacheVersion and the value in column LastModifiedTime is updated with the current time of the back-end database server in UTC format. Otherwise the values in DataCacheVersion and LastModifiedTime columns are not updated. In both cases, final value in the DataCacheVersion column is returned in @finalDataCacheVersion.

The T-SQL syntax for the stored procedure is as follows:

```
PROCEDURE Admin_SetPartitionDataCacheVersion (
    @partitionID uniqueidentifier
    ,@oldDataCacheVersion int
    ,@newDataCacheVersion int
    ,@finalDataCacheVersion int OUTPUT
    ,@correlationId uniqueidentifier = null
);
```

**@partitionID:** A GUID identifying the partition (1) for which the DataCacheVersion will be set. MUST be a value from column PartitionID of table Tenants.

**@oldDataCacheVersion:** The old version of the data cache that the caller specifies. If the version value in column DataCacheVersion for the specified partition (1) in Tenants table matches the value in @oldDataCacheVersion, then the value in column DataCacheVersion MUST be updated to the value specified in @newDataCacheVersion. If the version value in column DataCacheVersion for the specified partition (1) in Tenants table does not match the value in @oldDataCacheVersion, then the value in column DataCacheVersion MUST NOT be updated.

**@newDataCacheVersion:** The new version for the data cache.

**@finalDataCacheVersion:** Output parameter which will receive the final version of the data cache from DataCacheVersion column in Tenants table for the specified partition (1).

**@correlationId:** The optional request identifier for the current request.

**Return Values:** An integer which MUST be 0.

**Result Sets:** MUST NOT return any result sets.

### 3.1.5.5 Admin\_SetPartitionProperties

The **Admin\_SetPartitionProperties** is called to set the properties for a partition (1).

Values in the [Tenants](#) table corresponding to the input parameters MUST be updated if the input parameter value is NOT NULL. The value in the LastModifiedTime column in the Tenants table MUST always be updated with the current time of the back-end database server in UTC format.

The T-SQL syntax for the stored procedure is as follows:

```
PROCEDURE Admin_SetPartitionProperties (
    @partitionID uniqueidentifier
    ,@canonicalMySitePortalUrl nvarchar(2084) = null
    ,@previousMySitePortalUrl nvarchar(2084) = null
    ,@canonicalSearchCenterUrl nvarchar(2084) = null
```

```
,@peopleResultsScope int = null
,@documentResultsScope int = null
,@defaultRssFeed nvarchar(2084) = null
,@mySiteEmailSenderName nvarchar(max) = null
,@synchronizationOU nvarchar(max) = null
,@serializedUserAcl nvarchar(max) = null
,@profileMasterCacheVersion int = null
,@secondaryMySiteOwner nvarchar(max) = null
,@newsFeedEnabled bit = null
,@langPacksApplied nvarchar(max) = null
,@correlationId uniqueidentifier = null
);
```

**@partitionID:** A GUID identifying the partition (1) whose properties will be set. MUST be a value from column PartitionID of table Tenants.

**@canonicalMySitePortalUrl:** A string specifying the new canonical URL for the partition's (1) my site portal. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@previousMySitePortalUrl:** A string specifying the new value for previous URL for the partition's (1) my site portal. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@canonicalSearchCenterUrl:** A string specifying the new canonical URL for the partition's (1) search center. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@peopleResultsScope:** An integer value specifying the new scope for people search results. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@documentResultsScope:** An integer value specifying the new scope for document search results. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@defaultRssFeed:** A string specifying the new default RSS feed URL. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@mySiteEmailSenderName:** A string specifying the new sender e-mail address of my site e-mails. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@synchronizationOU:** A string specifying the new organizational unit of the partition (1) for synchronization. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@serializedUserAcl:** A string specifying the new serialized form of the user access control list (ACL) for the partition (1). This value MUST be a valid XML document instance of **acl** type defined in section [2.2.6.3.1](#). If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@profileMasterCacheVersion:** An integer value specifying the version number of the internal profile master cache. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@secondaryMySiteOwner:** A string specifying the new secondary my site owner. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@newsFeedEnabled:** A bit value specifying whether or not the news feed is enabled. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@langPacksApplied:** A string specifying the language packs whose localizations have been applied to the default (or built-in or standard or whatever terminology makes sense) user profile properties. If this value is NULL, then the protocol server MUST NOT change the value in the user profile store.

**@correlationId:** The optional request identifier for the current request.

**Return Values:** An integer which MUST be 0.

**Result Sets:** MUST NOT return any result sets.

### 3.1.5.6 Admin\_SetupPartition

The **Admin\_SetupPartition** stored procedure is called to initialize the user profile store for use by a specific partition (1).

The T-SQL syntax for the stored procedure is as follows:

```
PROCEDURE Admin_SetupPartition (  
    @partitionID uniqueidentifier  
    ,@correlationId uniqueidentifier = null  
);
```

**@partitionID:** A GUID to identify the new partition (1). A new row is created for the specified partition (1) with the @partitionID value in PartitionID column in [Tenants](#) table if a row with the @partitionID value in PartitionID column does not already exist.

**@correlationId:** The optional request identifier for the current request.

**Return Values:** An integer which MUST be in the following table.

Value	Description
1	The specified partition (1) already exists.
0	Successful execution.

**Result Sets:** MUST NOT return any result sets.

### 3.1.5.7 Admin\_GetUpdatedPartitionProperties

The **Admin\_GetUpdatedPartitionProperties** stored procedure is called to get the properties for partitions (1) that have been updated after a specific time.

The T-SQL syntax for the stored procedure is as follows:

```
PROCEDURE Admin_GetUpdatedPartitionProperties (  
    @lastCachedTime datetime  
    ,@currentCachedTime datetime = null OUTPUT  
    ,@correlationId uniqueidentifier = null  
);
```

**@lastCachedTime:** A time stamp value in UTC format specifying the last time the partition (1) properties were queried by the caller. The result set MUST contain information corresponding to partitions that have a value in the LastModifiedTime column which is greater than lastCachedTime.

**@currentCachedTime:** A time stamp value in UTC format specifying the current time of the back-end database server. Any input value MUST be ignored.

**@correlationId:** The optional request identifier for the current request.

**Return Values:** An integer which MUST be 0.

**Result Sets:**

This stored procedure MUST return a [PartitionProperties](#)

### 3.1.5.8 Admin\_SetPartitionUserAcl

The **Admin\_SetPartitionUserAcl** is called to set the serialized form of the user access control list (ACL) for the partition (1).

If the ACL value in column SerializedUserAcl in [Tenants](#) table matches the value in @oldSerializedUserAcl, then the value in column SerializedUserAcl is updated to the value specified in @newSerializedUserAcl, the value in column LastModifiedTime is updated with the current time of the back-end database server in UTC format and 0 is returned to indicate successful execution. Otherwise the values in SerializedUserAcl and LastModifiedTime columns are not updated and 1 is returned to indicate concurrent update error.

The T-SQL syntax for the stored procedure is as follows:

```
PROCEDURE Admin_SetPartitionUserAcl (  
    @partitionID uniqueidentifier  
    ,@oldSerializedUserAcl nvarchar(max)  
    ,@newSerializedUserAcl nvarchar(max)  
    ,@correlationId uniqueidentifier = null  
);
```

**@partitionID:** A GUID identifying the partition (1) whose ACL property will be set. MUST be a value from column PartitionID of table Tenants.

**@oldSerializedUserAcl:** A string specifying the latest value for the serialized form of the user access control list (ACL) for the partition (1) which the caller retrieved from the user profile store. This value MUST be a valid XML document instance of **acl** type defined in section [2.2.6.3.1](#).

**@newSerializedUserAcl:** A string specifying the new value for the serialized form of the user access control list (ACL) for the partition (1). This value MUST be a valid XML document instance of **acl** type defined in section [2.2.6.3.1](#).

**@correlationId:** The optional request identifier for the current request.

**Return Values:** An integer which MUST be in the following table.

Value	Description
1	Concurrent update error.
0	Successful execution.

**Result Sets:** MUST NOT return any result sets.

### **3.1.6 Timer Events**

None.

### **3.1.7 Other Local Events**

None.

## **3.2 Client Details**

None.

### **3.2.1 Abstract Data Model**

None.

### **3.2.2 Timers**

None.

### **3.2.3 Initialization**

None.

### **3.2.4 Higher-Layer Triggered Events**

None.

### **3.2.5 Message Processing Events and Sequencing Rules**

None.

### **3.2.6 Timer Events**

None.

### **3.2.7 Other Local Events**

None.

## 4 Protocol Examples

### 4.1 Create a New Partition

This example describes the requests that are made when a user profile store administrator creates and sets up a new partition (1). This example assumes that the user profile store was already created with a default partition (1).

In this example, steps 1 through 4 occur in the specified order. The following actions happen:

1. -- Admin\_SetupPartition -->
2. <-- Return code is ignored --
3. -- Admin\_SetPartitionProperties -->
4. <-- Return code is ignored --

The protocol client first calls Admin\_SetupPartition to create the partition:

```
exec dbo.Admin_SetupPartition
@partitionID='7A9E3CAC-0B81-49A0-BFEE-5C33A3874916',
@correlationId='00000000-0000-0000-0000-000000000000'
```

The protocol server creates a partition from this information and returns 1, which is ignored.

The protocol client then calls Admin\_SetPartitionProperties

```
exec dbo.Admin_SetPartitionProperties
@partitionID='7A9E3CAC-0B81-49A0-BFEE-5C33A3874916',
@correlationId='00000000-0000-0000-0000-000000000000',
@canonicalMySitePortalUrl=N'http://server.example.com/My/',
@canonicalSearchCenterUrl=N'',
@peopleResultsScope=0,
@documentResultsScope=1,
@defaultRssFeed=N'',
@mySiteEmailSenderName=N'MySite',
@synchronizationOU=default,
@serializedUserAcl=N'<acl version="1.0"><ace identityName="nt authority\authenticated users"
displayName="NT AUTHORITY\Authenticated Users" sid="AQEAAAAAAAAULAAAA" allowRights="7"
denyRights="0" /></acl>',
@profileMasterCacheVersion=0
```

The protocol server sets up the partition according to these parameters and then returns 0, which is ignored.

### 4.2 Verify Partition Information

In this example, a user profile store administrator wants to verify information about the partition (1) they created in the previous example.

The protocol client first calls Admin\_ListPartitions.

```
exec dbo.Admin_ListPartitions
```

The protocol server responds with the following results.

PartitionID
0C37852B-34D0-418E-91C6-2AC25AF4BE5B
7A9E3CAC-0B81-49A0-BFEE-5C33A3874916

Using the PartitionID which matches the identifier that the administrator passed earlier, the protocol client now calls Admin\_GetPartitionProperties.

```

declare @p4 datetime
set @p4='2010-01-15 17:51:09.6000000'
exec dbo.Admin_GetPartitionProperties
@correlationId='806597C7-2A34-4BB3-A807-A8664115E8D1',
@top=1000,
@lastPartitionID=NULL,
@currentCachedTime=@p4 output
select @p4

```

The protocol server gets the properties requested and responds with the following output. It also returns result set, detailed following, and a return value of 0 which is ignored. Several columns in the result set which are empty have been omitted for clarity (omitted columns are PreviousMySitePortalUrl, CanonicalSearchCenterUrl, SynchronizationOU and DefaultRssFeed).

```

currentCachedTime
2010-01-15 17:52:15.917

```

Partition Identifier	Canonical MySite PortalUrl	People Results Scope	Document Results Scope	MySite E-mail Sender Name	Profile Master Cache Version	Data Cache Version	Serialized UserACL
0C37852B-34D0-418E-91C6-2AC25AF4BE5B	http://server.example.com/host/My/	0	1	MySite	0	1	<acl version="1.0"><ace identityName="nt authority\authenticated users" displayName="NT AUTHORITY\Authenticated Users" sid="AQEAAAAAAAAULAAAA" allowRights="7" denyRights="0" /></acl>
7A9E3CAC-0B81-49A0-BFEE-5C33A387	http://server.example.com/My/	0	1	MySite	0	1	<acl version="1.0"><ace identityName="nt authority\authenticated users" displayName="NT AUTHORITY\Authenticated Users" sid="AQEAAAAAAAAULAAAA" allowRights="7" denyRights="0" /></acl>

Partition Identifier	Canonical MySite PortalUri	People Results Scope	Document Results Scope	MySite E-mail Sender Name	Profile Master Cache Version	Data Cache Version	Serialized UserACL
4916							ated users" displayName="NT AUTHORITY\Authe nticated Users" sid="AQEAAAAAAAA ULAAAA" allowRights="7" denyRights="0" /></acl>

## **5 Security**

### **5.1 Security Considerations for Implementers**

Interactions with SQL are susceptible to tampering and other types of security risks. Implementers are advised to sanitize the input parameters for a stored procedure before invoking the stored procedure.

### **5.2 Index of Security Parameters**

None.

## 6 Appendix A: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs:

- Microsoft® SharePoint® Server 2010

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms SHOULD or SHOULD NOT implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies that the product does not follow the prescription.

## 7 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

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