[MS-UPSCSP2]: User Profile Service Application Caching Stored Procedures Version 2 Protocol Specification

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1 Introduction

This document specifies the User Profile Service Application Caching Stored Procedures Protocol. This protocol enables a protocol client to retrieve the user information stored in a user profile store on a site.

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]:

Coordinated Universal Time (UTC) GUID security identifier (SID)

The following terms are defined in [MS-OFCGLOS]:

back-end database server e-mail address front-end Web server master account profile subtype request identifier result set return code Security Account Manager (SAM) Session Initiation Protocol (SIP) address stored procedure Structured Query Language (SQL) Transact-Structured Query Language (T-SQL) **Uniform Resource Identifier (URI)** user profile user profile record identifier 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. We

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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

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

[MS-UPSPROF2] Microsoft Corporation, "<u>User Profile Stored Procedures Version 2 Protocol</u> Specification".

[MS-WSSFO2] Microsoft Corporation, "<u>Windows SharePoint Services (WSS): File Operations Database Communications Version 2 Protocol Specification</u>".

[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

1.2.2 Informative References

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

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

1.3 Overview

This protocol enables a protocol client to retrieve user information stored in the **user profile store**. It allows the protocol client to pass in a list of **e-mail addresses**, user names, **GUID** identifiers, **user profile record identifiers** or **security identifiers** (**SIDs**) and returns the **user profile** data.

This protocol can be used in scenarios which require access to user profile data of multiple users in one call.

1.4 Relationship to Other Protocols

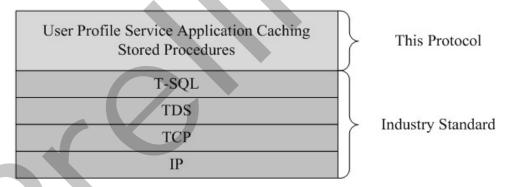


Figure 1: This protocol in relation to other protocols

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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 for the retrieval of user profile data of multiple users. It can retrieve user profiles of as many users as can be specified via the input parameters and allowed by **Transact-Structured Query Language (T-SQL)**.

1.7 Versioning and Capability Negotiation

Versions of the data structures or stored procedures contained in the database are expected to be the same as those on the **front-end Web server**. If the stored procedures do not provide the calling parameters or return values as expected, the results of the call are indeterminate.

The version negotiation process for this protocol is identical to the process defined in [MS-WSSFO2] section 1.7.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.



2 Messages

2.1 Transport

[MS-TDS] specifies the transport protocol used to call the stored procedures, query **Structured Query Language (SQL)** tables, get **return codes**, and return **result sets**.

2.2 Common Data Types

2.2.1 Simple Data Types and Enumerations

No common simple data types or enumerations are defined in this protocol.

2.2.2 Bit Fields and Flag Structures

No common bit field or flag structures are defined in this protocol.

2.2.3 Binary Structures

No common binary structures are defined in this protocol.

2.2.4 Result Sets

2.2.4.1 profile_GetBulkUserProfileData.ResultSet0

The profile_GetBulkUserProfileData.ResultSet0 result set returns the basic user profile properties corresponding to the given set of input parameters.

LookupValue nvarchar(256),
RecordID bigint,
UserID uniqueidentifier,
NTName nvarchar(400),
PreferredName nvarchar(256),
Email nvarchar(256),
SID varbinary(512),
Manager nvarchar(400),
SipAddress nvarchar(250),
LastUpdate datetime,
MasterRecordID bigint,
ProfileSubtypeID int,
PictureUrl nvarchar(max),
PartitionID uniqueidentifier,

LookupValue: The e-mail address or the user name used to retrieve the user profile data.

RecordID: A record identifier of the user profile. There MUST ONLY be one row corresponding to a given record identifier in this result set.

UserID: A GUID identifier of the user profile.

NTName: A user name associated with the user profile.

PreferredName: The name of the entity as specified in the user profile.

Email: An e-mail address associated with the user profile.

SID: A security identifier (SID) associated with the user profile.

Manager: The user name of the manager of the user as specified in the user profile.

SipAddress: Contains the **Session Initiation Protocol (SIP) address** associated with the user

profile.

LastUpdate: A UTC value specifying the last time the user profile was updated.

MasterRecordID: Contains the identifier of the **master account** associated with the user profile.

If this row is the master account itself, this value MUST be the same as RecordID.

ProfileSubtypeID: Contains the value identifier of the **profile subtype**.

PictureUrl: A **URI** pointing to the picture associated with the user profile.

PartitionID: A GUID used to filter the current request. This value MUST NOT be null or empty.

2.2.4.2 profile_GetBulkUserProfileDataByRecordID.ResultSet0

The profile_GetBulkUserProfileDataByRecordID.ResultSet1 result set returns the basic user profile properties corresponding to the given set of input parameters.

LookupValue bigint,
RecordID bigint,
UserID uniqueidentifier,
NTName nvarchar(400),
PreferredName nvarchar(256),
Email nvarchar(256),
SID varbinary(512),
Manager nvarchar(400),
SipAddress nvarchar(250),
LastUpdate datetime,
MasterRecordID bigint,
ProfileSubtypeID int,
PictureUrl nvarchar(max),
PartitionID uniqueidentifier,

LookupValue: The user profile record identifier used to retrieve the user profile data.

RecordID: A record identifier of the user profile. There MUST be only one row corresponding to a given record identifier in this result set.

UserID: A GUID identifier of the user profile.

NTName: A user name associated with the user profile.

PreferredName: The name of the entity as specified in the user profile.

Email: An e-mail address associated with the user profile.

SID: A security identifier (SID) associated with the user profile.

Manager: The user name of the manager of the user as specified in the user profile.

SipAddress: Contains the Session Initiation Protocol (SIP) address associated with the user profile.

LastUpdate: A UTC value specifying the last time the user profile was updated.

MasterRecordID: Contains the identifier of the master account associated with the user profile. If this row is the master account itself, this value MUST be the same as **RecordID**.

ProfileSubtypeID: Contains the value identifier of the profile subtype.

PictureUrl: A URI pointing to the picture associated with the user profile.

PartitionID: A GUID used to filter the current request. This value MUST NOT be null or empty.

2.2.4.3 profile_GetBulkUserProfileDataByUserID.ResultSet0

The profile_GetBulkUserProfileDataByUserID.ResultSet1 result set returns the basic user profile properties corresponding to the given set of input parameters.

LookupValue uniqueidentifier,
RecordID bigint,
UserID uniqueidentifier,
NTName nvarchar(400),
PreferredName nvarchar(256),
Email nvarchar(256),
SID varbinary(512),
Manager nvarchar(400),
SipAddress nvarchar(250),
LastUpdate datetime,
MasterRecordID bigint,
ProfileSubtypeID int,
PictureUrl nvarchar(max),
PartitionID uniqueidentifier,

LookupValue: The GUID identifier of the user profile used to retrieve the user profile data.

RecordID: A record identifier of the user profile. There MUST be only one row corresponding to a giver record identifier in this result set.

UserID: A GUID identifier of the user profile.

NTName: A user name associated with the user profile.

PreferredName: The name of the entity, as specified in the user profile.

Email: An e-mail address associated with the user profile.

SID: A security identifier (SID) associated with the user profile.

Manager: The user name of the manager of the user as specified in the user profile.

SipAddress: Contains the Session Initiation Protocol (SIP) address associated with the user profile.

LastUpdate: A UTC value specifying the last time the user profile was updated.

MasterRecordID: The identifier of the master account associated with the user profile. If this row is the master account itself, this value MUST be the same as **RecordID**.

ProfileSubtypeID: The value identifier of the profile subtype.

PictureUrl: A URI pointing to the picture associated with the user profile.

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PartitionID: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

2.2.4.4 profile_GetUserProfileDataBySID.ResultSet0

The profile_GetBulkUserProfileDataBySID.ResultSet1 result set returns the basic user profile properties corresponding to the given set of input parameters.

LookupValue varbinary(512),
RecordID bigint,
UserID uniqueidentifier,
NTName nvarchar(400),
PreferredName nvarchar(256),
Email nvarchar(256),
SID varbinary(512),
Manager nvarchar(400),
SipAddress nvarchar(250),
LastUpdate datetime,
MasterRecordID bigint,
ProfileSubtypeID int,
PictureUrl nvarchar(max),
PartitionID uniqueidentifier,

LookupValue: The security identifier (SID) used to retrieve the user profile data.

RecordID: A record identifier of the user profile. There MUST be only one row corresponding to a given record identifier in this result set.

UserID: A GUID identifier of the user profile.

NTName: A user name associated with the user profile.

PreferredName: The name of the entity, as specified in the user profile.

Email: An e-mail address associated with the user profile.

SID: A security identifier (SID) associated with the user profile.

Manager: The user name of the manager of the user as specified in the user profile.

SipAddress: The Session Initiation Protocol (SIP) address associated with the user profile.

LastUpdate: A UTC value specifying the last time the user profile was updated.

MasterRecordID: The identifier of the master account associated with the user profile. If this row is the master account itself, this value MUST be the same as **RecordID**.

ProfileSubtypeID: The value identifier of the profile subtype.

PictureUrl: A URI pointing to the picture associated with the user profile.

PartitionID: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

2.2.4.5 profile_GetBulkUserProfileData.ResultSet1

The profile_GetBulkUserProfileData.ResultSet1 result set returns the user profile properties corresponding to the given set of input parameters.

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RecordID bigint,
PropertyID bigint,
PropertyVal sql variant,

RecordID: A user profile record identifier.

PropertyID: The identifier of the user profile property.

PropertyVal: The value of the user profile property that is specified by PropertyID.

2.2.5 Tables and Views

No common table or view structures are defined in this protocol.

2.2.6 XML Structures

No common XML structures are defined in this protocol.

2.2.6.1 Namespaces

This specification does not define any common XML schema namespaces.

2.2.6.2 Simple Types

This specification does not define any common XML schema simple type definitions.

2.2.6.3 Complex Types

This specification does not define any common XML schema complex type definitions.

2.2.6.4 Elements

This specification does not define any common XML schema element definitions.

2.2.6.5 Attributes

This specification does not define any common XML schema attribute definitions.

2.2.6.6 Groups

This specification does not define any common XML schema group definitions.

2.2.6.7 Attribute Groups

This specification does not define any common XML schema attribute group definitions.

3 Protocol Details

3.1 Common Details

None.

3.2 Server Details

3.2.1 Abstract Data Model

This section describes a conceptual model of possible data organization that an implementation maintains to participate in this protocol. The described organization is provided to facilitate the explanation of how the protocol behaves. This document does not mandate that implementations adhere to this model as long as their external behavior is consistent with that described in this document.

The abstract data model for this protocol is identical to the model defined in [MS-UPSPROF2] section 3.1.1.

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

3.2.5.1 profile_GetBulkUserProfileDataByEmail

The **profile_GetBulkUserProfileDataByEmail** stored procedure is called to retrieve the user profiles corresponding to a list of e-mail addresses or Session Initiation Protocol (SIP) addresses.

```
PROCEDURE profile_GetBulkUserProfileDataByEmail (
@PartitionID uniqueidentifier
,@KeyValue nvarchar(4000)
,@ExtendedPropertyIDs nvarchar(4000)
,@correlationId uniqueidentifier = null
);
```

@PartitionID: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

@KeyValue: A list of e-mail or Session Initiation Protocol (SIP) addresses. The values MUST be separated by ";". If ";" or "^" is part of the e-mail address, they MUST be escaped using the "^" character. This parameter MUST NOT be NULL.

@ExtendedPropertyIDs: A list of user profile property identifiers. The values MUST be integers and they MUST be separated by ";". This parameter MUST NOT be NULL.

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

Return Values: An integer that MUST be zero.

Result Sets:

This stored procedure MUST return a **profile_GetBulkUserProfileData.ResultSet0** (section 2.2.4.1).profile_GetBulkUserProfileData.ResultSet0

This stored procedure MUST return a profile GetBulkUserProfileData.ResultSet1

3.2.5.2 profile_GetBulkUserProfileDataByNTName

The **profile_GetBulkUserProfileDataByNTName** stored procedure is called to retrieve the user profiles corresponding to a list of **Security Account Manager (SAM)** account names.

```
PROCEDURE profile_GetBulkUserProfileDataByNTName (
@PartitionID uniqueidentifier
,@KeyValue nvarchar(4000)
,@ExtendedPropertyIDs nvarchar(4000)
,@correlationId uniqueidentifier = null
);
```

@PartitionID: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

@KeyValue: A list of Security Account Manager (SAM) account names. The values MUST be separated by ";". If ";" or "^" is part of the e-mail address, they MUST be escaped using a "^" character. This parameter MUST NOT be NULL.

@ExtendedPropertyIDs: A list of user profile property identifiers. The values MUST be **integers** and MUST be separated by ";". This parameter MUST NOT be NULL.

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

Return Values: An integer that MUST be zero.

Result Sets:

This stored procedure MUST return a **profile_GetBulkUserProfileData.ResultSet0**, as specified in section <u>2.2.4.1</u>.profile_GetBulkUserProfileData.ResultSet0

This stored procedure MUST return a **profile_GetBulkUserProfileData.ResultSet0**, as specified in section <u>2.2.4.5</u>.profile_GetBulkUserProfileData.ResultSet1

3.2.5.3 profile_GetBulkUserProfileDataByRecordID

The **profile_GetBulkUserProfileDataByRecordID** stored procedure is called to retrieve the user profiles corresponding to a list of user profile record identifiers.

```
PROCEDURE profile_GetBulkUserProfileDataByRecordID (
@PartitionID uniqueidentifier
, @KeyValue nvarchar(4000)
, @ExtendedPropertyIDs nvarchar(4000)
, @correlationId uniqueidentifier = null
);
```

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@PartitionID: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

@KeyValue: A list of user profile record identifiers. The values MUST be separated by ";". This parameter MUST NOT be NULL.

@ExtendedPropertyIDs: A list of user profile property identifiers. The values MUST be **integers** and they MUST be separated by ";". This parameter MUST NOT be NULL.

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

Return Values: An integer that MUST be zero.

Result Sets:

This stored procedure MUST return a profile GetBulkUserProfileDataByRecordID.ResultSet0

This stored procedure MUST return a profile GetBulkUserProfileData.ResultSet1

3.2.5.4 profile_GetBulkUserProfileDataByUserID

The **profile_GetBulkUserProfileDataByUserID** stored procedure is called to retrieve the user profiles corresponding to a list of user profile identifiers.

```
PROCEDURE profile_GetBulkUserProfileDataByUserID (
@PartitionID uniqueidentifier
,@KeyValue nvarchar(4000)
,@ExtendedPropertyIDs nvarchar(4000)
,@correlationId uniqueidentifier = null
);
```

@PartitionID: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

@KeyValue: A list of user profile identifiers. The values MUST be separated by ";". This parameter MUST NOT be NULL.

@ExtendedPropertyIDs: A list of user profile property identifiers. The values MUST be **integers** and they MUST be separated by ";". This parameter MUST NOT be NULL.

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

Return Values: An integer that MUST be zero.

Result Sets:

For the following combination of parameters,

@PartitionID: A valid GUID value that is, 0C37852B-34D0-418E-91C6-2AC25AF4BE5B)

@KeyValue: A non-null string containing at least one valid user profile identifier (that is, 6C4DA8CD-0095-4E59-B5D1-4454E74C68F5)

This stored procedure MUST return a profile GetBulkUserProfileDataByUserID.ResultSet0

This stored procedure MUST return a profile GetBulkUserProfileData.ResultSet1

3.2.5.5 profile_GetUserProfileDataBySID

The profile_GetUserProfileDataBySID stored procedure is called to retrieve the user profile corresponding to a user profile SID.

```
PROCEDURE profile_GetUserProfileDataBySID (
@PartitionID uniqueidentifier
,@KeyValue varbinary(512)
,@ExtendedPropertyIDs nvarchar(4000)
,@correlationId uniqueidentifier = null
):
```

@PartitionID: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

@KeyValue: A user profile SID. This parameter MUST NOT be NULL.

@ExtendedPropertyIDs: A list of user profile property identifiers. The values MUST be integers and they MUST be separated by ';'. This parameter MUST NOT be NULL.

@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 profile GetUserProfileDataBySID.ResultSet0

This stored procedure MUST return a profile GetBulkUserProfileData.ResultSet1

3.2.6 Timer Events

None.

3.2.7 Other Local Events

None.

3.3 Client Details

None.

3.3.1 Abstract Data Model

None.

3.3.2 Timers

None.

3.3.3 Initialization

None.

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3.3.4 Higher-Layer Triggered Events

None.

3.3.5 Message Processing Events and Sequencing Rules

None.

3.3.6 Timer Events

None.

3.3.7 Other Local Events



4 Protocol Examples

This section provides specific example scenarios for bulk retrieving user profile data using either of the following - NT Names, e-mail addresses, user profile identifiers, security identifier (SID), user profile record identifiers.

Example Data

In these examples, the data is originally arranged this way:

 The user profile store contains five user profiles, with user names, NTNames, e-mail addresses and user profile identifiers as shown in the following table

User Name	NTName	E-mail address	User profile identifier
Syed Abbas	contoso\syed	syed@contoso.com	4bccfd46-fb01-4c9b-988c-0730eaed529a
Lori Kane	contoso\lori	lori@contoso.com	b8110f57-8f8e-4c4a-9570-1c75828e18ef
Tai Yee	contoso\tai	tai@contoso.com	5737a7f5-eb81-4b1f-adae-873e1e762e74
Ellen Adams	contoso\ellen	ellen@contoso.com	7c21b982-643c-4cb4-89c7-09cbe41f030c
Sara Davis	contoso\sara	sara@contoso.com	0a99119e-37fa-445a-b9ba-a6094e0ab52d

The following identifiers are used in the examples in this section:

- PartitionID 0C37852B-34D0-418E-91C6-2AC25AF4BE5B
- CorrelationID 54bfa4f5-b4c0-48b8-abf2-601b7cf14117
- Extended Property identifiers as shown in the following table

Extended	d Property Identifier	Extended Property Name
13		Title
14		Department

- User profile Security Identifier (SID) -0x0105000000000515000000A065CF7E784B9B5FE77C8770AE0C1F00
- User profile Record Identifiers 2106, 2107, 2108, 2109 and 2110

4.1 Retrieving multiple user profiles by their NT Names

To retrieve the five user profiles by their NT Names, consider the following T-SQL syntax used by the protocol client to call the **profile_GetBulkUserProfileDataByNTName**:

declare @MyPartitionID uniqueidentifier declare @MyCorrelationID uniqueidentifier

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```
declare @MyExtendedPropertyIDs nvarchar(4000)
declare @NTNameList nvarchar(4000)
set @MyPartitionID=N'0C37852B-34D0-418E-91C6-2AC25AF4BE5B'
set @MyCorrelationID=N'54bfa4f5-b4c0-48b8-abf2-601b7cf14117'
set @MyExtendedPropertyIDs = N'13;14'
set @NTNameList=N'contoso\syed;contoso\lori;contoso\tai;contoso\ellen;contoso\sara'
exec profile_GetBulkUserProfileDataByNTName
@PartitionID=@MyPartitionID,
@KeyValue=@NTNameList,
@ExtendedPropertyIDs=@MyExtendedPropertyIDs,
@correlationId=@MyCorrelationID
```

4.2 Retrieving multiple user profiles by their e-mail addresses

To retrieve the five user profiles by their e-mail addresses, consider the following T-SQL syntax used by the protocol client to call the **profile_GetBulkUserProfileDataByEmail**:

```
declare @MyPartitionID uniqueidentifier
declare @MyCorrelationID uniqueidentifier
declare @MyExtendedPropertyIDs nvarchar(4000)
declare @EmailList nvarchar(4000)
set @MyPartitionID=N'0C37852B-34D0-418E-91C6-2AC25AF4BE5B'
set @MyCorrelationID=N'54bfa4f5-b4c0-48b8-abf2-601b7cf14117'
set @MyExtendedPropertyIDs = N'13;14'
set @EmailList = N'syed@contoso.com;lori@contoso.com;tai@contoso.com;ellen@contoso.com;sara@contoso.com'
exec profile_GetBulkUserProfileDataByEmail
@PartitionID=@MyPartitionID,
@KeyValue=@EmailList,
@ExtendedPropertyIDs=@MyExtendedPropertyIDs,
@correlationId=@MyCorrelationID
```

4.3 Retrieving multiple user profiles by their user profile identifiers

To retrieve the five user profiles by their user profile identifiers, consider the following T-SQL syntax used by the protocol client to call the **proc_GetBulkUserProfileDataByUserID**:

```
declare @MyPartitionID uniqueidentifier
declare @MyCorrelationID uniqueidentifier
declare @MyExtendedPropertyIDs nvarchar(4000)
declare @UserIDList nvarchar(4000)
set @MyPartitionID=N'0C37852B-34D0-418E-91C6-2AC25AF4BE5B'
set @MyCorrelationID=N'54bfa4f5-b4c0-48b8-abf2-601b7cf14117'
set @MyExtendedPropertyIDs = N'13;14'
set @UserIDList=N'4bccfd46-fb01-4c9b-988c-0730eaed529a;b8110f57-8f8e-4c4a-9570-
1c75828e18ef;5737a7f5-eb81-4b1f-adae-873e1e762e74;7c21b982-643c-4cb4-89c7-
09cbe41f030c;0a99119e-37fa-445a-b9ba-a6094e0ab52d'
exec profile_GetBulkUserProfileDataByUserID
@PartitionID=@MyPartitionID,
@KeyValue=@UserIDList,
@ExtendedPropertyIDs=@MyExtendedPropertyIDs,
@correlationId=@MyCorrelationID
```

4.4 Retrieving a user profile by its security identifier

To retrieve a user profile by its security identifier (SID), consider the following T-SQL syntax used by the protocol client to call the **profile_GetUserProfileDataBySID**:

```
declare @MyPartitionID uniqueidentifier
declare @MyCorrelationID uniqueidentifier
declare @MyExtendedPropertyIDs nvarchar(4000)
declare @SID varbinary(512)
set @MyPartitionID=N'0C37852B-34D0-418E-91C6-2AC25AF4BE5B'
set @MyCorrelationID=N'54bfa4f5-b4c0-48b8-abf2-601b7cf14117'
set @MyExtendedPropertyIDs = N'13;14'
set @SID=0x01050000000000005150000000A065CF7E784B9B5FE77C8770AE0C1F00
exec profile_GetUserProfileDataBySID
@PartitionID=@MyPartitionID,
@KeyValue=@SID,
@ExtendedPropertyIDs=@MyExtendedPropertyIDs,
@correlationId=@MyCorrelationID
```

4.5 Retrieving multiple user profiles by their record identifiers

To retrieve the five user profiles by their user profile record identifiers, consider the following T-SQL syntax used by the protocol client to call the **profile_GetBulkUserProfileDataByRecordID**:

```
declare @MyPartitionID uniqueidentifier
declare @MyCorrelationID uniqueidentifier
declare @MyExtendedPropertyIDs nvarchar(4000)
declare @RecordIDList nvarchar(4000)
set @MyPartitionID=N'0C37852B-34D0-418E-91C6-2AC25AF4BE5B'
set @MyCorrelationID=N'54bfa4f5-b4c0-48b8-abf2-601b7cf14117'
set @MyExtendedPropertyIDs = N'13;14'
set @RecordIDList = N'2110;2109;2108;2107;2106'
exec profile_GetBulkUserProfileDataByRecordID
@PartitionID=@MyPartitionID,
@KeyValue=@RecordIDList,
@ExtendedPropertyIDs=@MyExtendedPropertyIDs,
@correlationId=@MyCorrelationID
```



5 Security

5.1 Security Considerations for Implementers

Interactions with SQL are susceptible to tampering and other forms of security risks. Implementers are advised to sanitize input parameters for stored procedures before invoking them.

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 2013 Preview

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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