# eServices Administrator's Guide

## UCS Administration

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# Contents

# UCS Administration

This section provides information for administrators regarding Universal Contact Server (UCS). In addition to the topics on this page, there is also the following:

- Special instructions on enabling a user who is not the schema owner to run UCS with an Oracle database
- Queries that users of the UCS database must have permission to run
- Updating interaction data in a routing strategy
- Limitations to observe in operating UCS
- Information on the UCS Manager user interface
- Enabling full text searching of the UCS database

## Access to Configuration Server

Be sure to run UCS with a user that has write access to the Configuration Server database for all the tenants associated with this UCS (that is, the user specified on the `Security` tab of the UCS Application object).

This means that UCS does not support Configuration Server Proxy version 8.0.2 and earlier, which has only read access to the Configuration Server database. UCS does support Configuration Server Proxy version 8.0.3 and later.

## Client Connection Timeout

To avoid inconsistency, every client of UCS should have the timeout of its connection to UCS set to a higher value than the timeout of UCS's connection to its Database Access Point (DAP).

This allows UCS to consistently either perform long queries or abort them, in accord with the clients' requirements.

## Contact Identification and Creation

When a new interaction enters the system, UCS performs the following tasks:

1. Contact identification—UCS checks whether this interaction is coming from a known contact: more precisely, whether the contact data included in the new interaction matches an existing contact in the UCS database. UCS does this in response to a request from a media server, the `Identify Contact` Routing strategy object, or the Agent Interaction SDK `CreateInteraction` method.

2. Contact creation—If the contact does not exist in the database, UCS creates a new record to represent it.

# Character Sets

## Oracle

The character set `WE8ISO8859P1` does not have any representation of characters in the range 128–159. Because of this, with an Oracle database, attempting to save characters in this range in a column of type `NCHAR` or `NVARCHAR` results in corrupted data. Genesys recommends that you set the Oracle `NLS_CHARACTERSET` parameter to `WE8MSWIN1252` instead of `WE8ISO8859P1`. `WE8MSWIN1252` is a superset of `WE8ISO8859P1`, so there will be no data loss.

For support of nonlatin charsets, use the following parameter settings in Oracle:

```
NLS_CHARACTERSET AL32UTF8

NLS_NCHAR_CHARACTERSET AL16UTF16
```

## DB2

DB2 must use the UTF-8 codeset for the UCS database.

# TLS Connection as Windows Service

This also applies to E-mail Server.

When UCS has Transport Layer Security (TLS) configured, either as a server on its ESP port, or as a client in its connection to Message Server, follow these steps to enable it as a Windows Service:

1. Select the Windows service related to UCS.
2. Select the `Log On` tab. The default setting is `Log on as local system account.`
3. Select `Log on as this account` and provide the login/password of a local host user.

# Database Performance

## OLTP

For best performance, Genesys strongly recommends that you set up the UCS database as OLTP (online transaction processing).

## Tuning for Attachments

UCS uses the `Content` field of the `Document` table to store attachments; also, the `Content` field of the `ixnContent` table stores raw e-mails, including attachment data. If you plan to store large attachments (bigger than 5 MB), you should tune the database according to the recommendations of your database vendor.

For example, increasing the block size of database files for these fields can greatly enhance performance in access and storing of large attachments, at the cost of a slight loss of performance with smaller ones. Also, some databases offer the ability to partition data according to specified criteria. Both tables have a `theSize` column that you can use to do such partitioning. This could enable you to store small attachments in a specific file and large ones in another, for example.

Refer to the tuning guides of your database vendor for more information.