



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

# Microsoft Skype for Business Deployment Guide

Paired Front End Pools

---

## Contents

- 1 Paired Front End Pools
  - 1.1 Architecture with a single application and paired user Front End pools

## Paired Front End Pools

Architecture with a single application and paired user Front End pools

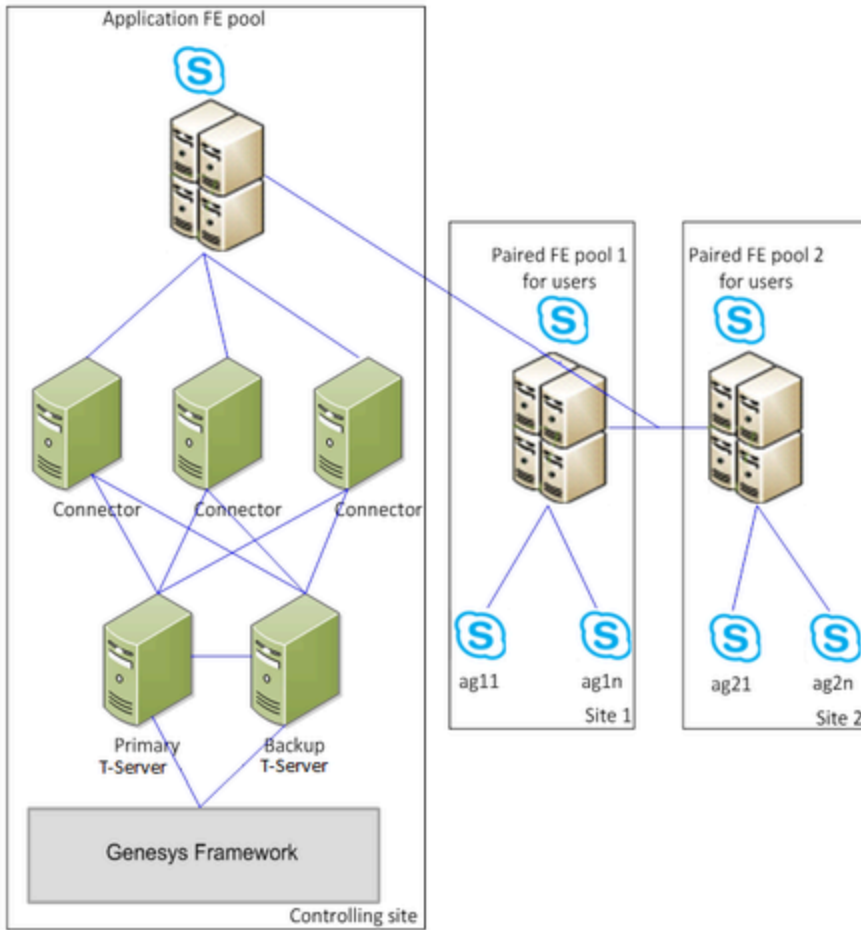
This deployment contains the following components:

- Single Enterprise Edition pool of Front End (FE) Servers for handling applications
- Paired pools of FE Servers for handling users and agents that reside at different geographic locations
- Computers in Trusted Application pool for Genesys Multimedia Connectors
- Servers required to host components such as Genesys Skype for Business T-Servers and Genesys Management Framework

The controlling site can be divided into two separate data centers:

1. The site with the Front End servers of the application.
2. The site with Connectors and Genesys software.

There are no restrictions or configuration limitations to perform this, except that the data interlink between sites must contain satisfactory conditions. The following figure illustrates the described architecture:



### User pool failover scenarios

The contact center behavior is the same as that in a deployment using a single pool for applications and users. The exception is that the complete failure of one of the user pools does not cause contact center failure. However, it reduces the availability of agents from the affected pool.

### User pool failover

According to Microsoft documentation (see <https://technet.microsoft.com/en-us/library/jj205184.aspx>), the user experiences the following scenarios during a failover.

- When a user is in a pool that fails, the user is logged out and the presence of this user is unknown until the failover has completed.
- The peer-to-peer sessions that include the participation and initiation of conference by the user will be terminated.
- The user cannot log back in until either the registrar resiliency timer expires or the administrator initiates failover procedures, whichever comes first.
- After the failover, when the user logs back in, the user will log in to the backup pool. If the user logs in before the failover has completed, the user will be in Resiliency mode until the failover is complete.

- The user can establish new, or restore previous, peer-to-peer sessions only after the failover is completed.
- Because the users in the affected pool are not fully available during the failover, Skype for Business servers might notify the Genesys call sessions that the user is removed or has disconnected. If there is only one participant, the session will be terminated by Genesys Connector.
- As the users in the affected pool are not completely available until the failover is completed, initiation of Genesys call sessions or adding such users to existing Genesys sessions might fail.

The recovery time depends on the administrator identifying the pool failure and initiating failover execution. This might take up to 60 minutes.

### User pool is available

There are no restrictions in operations when the failover is completed and the environment is stabilized. The performance of the system might be slightly affected.

### User pool failback (restoration of failed pool)

The behavior of paired pools during initial configuration or during failback (when the failed pool is restored) is similar to the behavior during failover.

- Participation of users is restricted based on the user's performance while in Resiliency mode. This corresponds to users that are transferred back to the restored pool, users in conferences, and users hosted by the application FE pool (that is Genesys controlled).
- Typically, completing failback from one pool to another (Recovery Time Objective (RTO)) can take anywhere from 15 to 20 minutes or more, up to 60 minutes.
- Recovery Point Objective (RPO), the time measure of data that might be lost due to failback, based on replication latency of backup service, is expected to be no more than 5 minutes. This time specifies the expected interval when the data might not have replicated during failback and would be lost. This loss will not be experienced by Genesys calls and sessions as they are hosted on an unaffected application FE pool.
- Genesys call control will not be affected because conferences will be hosted by an application FE pool.

## Advantages of the architecture

- The current Genesys T-Server and Connector for Skype for Business can be used out of the box without any concerns about where users are located.
- A failover from one user pool to another does not require applications or scripts other than those provided by Microsoft.
- Although performing a failover from one user pool to another would impact the availability of affected users, it will not impact Connectors.

## Limitations

Microsoft does not provide support for failover of the Application FE pool.