

Release Note





Document Version 1.2

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# **1** Introduction

This document describes new features and changes in the Zylinc 6.0 product suite compared to previous version Zylinc 5.5.

The Zylinc Product Suite consists of:

- Attendant Console
- Contact Center
- Service Center
- Operator
- Time

In cases where Zylinc Product Suite is mentioned, information is relevant for all products above.

The Zylinc 6.0 release is a major release, i.e. all modules need to be upgraded compared to previous versions.

Where indicated the described change/feature was available in the limited Release 5.6 also. If nothing is indicated the feature is available in 6.0 and onwards.

When upgrading from versions before 5.5 it is strongly recommended to read the 5.5 Release Note also.

Note: Some features described in this document might have been backported to 5.5 as hotfixes.



# 2 Features

### 2.1 Overview

#### ZyDesk – GUI

- Additional Gannt Columns for Lync and others (5.6)
- **CallAction** execute process support (5.6)
- Unified Login window (incl. Secure tunnel)
- Feedback form has been added
- Authentication via the Authentication server
- Search History via shortcuts (previous/next)

#### AC/SC/CC - GUI

- Autosearch on department (5.6)
- Configurable Active Calls component to allow all ID lookup data lookup to be visible (5.6)
- More Incoming Call columns added to allow all ID lookup data lookup to be visible (5.6)
- Additional Autotags in send message Autotext (5.6)
- HeadSet Mute/Hold functionality optional (5.6)
- Chat Queue GUI generic (XMPP)
- Agent select A-number on outgoing calls
- Personal announcement config in ZyDesk
- Customer Survey thirdparty support in AC,SC,CC
   Recordit Cloud
- Call Recording thirdparty support in AC,SC,CC
  - BroadWorks Call Recording
  - Recordit Call Recording
- Headset sound device can be selected, does not have to be default sound device.

#### Call & Queue Control features

- IVR Configuration configuration in browser (5.6)
- **A-number routing -** configuration in browser (5.6)
- Historical routing (5.6)
- Skill Based Routing based on Zylinc skills (5.6)
- Caller Rated Routing / VIP Routing (5.6)

#### **Multichannel Functionality**

Chat queues via XMPP (BroadWorks & Cisco)

#### Client - BroadWorks integration

- BroadWorks UC ONE as receptionist/agent softphone (5.6)
- BroadWorks UC ONE start chat from ZyDesk (5.6)
- BroadWorks huntgroups supervisor control (login/logout others) (5.6)

#### **Calendar and Directory Synchronization**

- Configuration of **Directory lookup priority** (5.6)
- XMPP support for BroadWorks and generic XMMP providers (5.6)
- BroadWorks Mobile linestate support for installations without BW Mobile extensions (5.6)
- User Mapping for mixed AD/Notes/.csv directories (5.6)
- BroadWorks Enterprise model support
- Multi PBX user handling improved

#### **CRM Integration**

• **Zendesk** ticket integration (5.6)

#### Wallboard & Statistics

- Stat Portal 6.0 new portal
  - Completely New look and feel

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- o Much faster generaton time
- KPI page for queues and users
- Multiple other improvements
- Advanced stat/BI add-on new 3rd party
- Scheduled Statistics .csv export for use by Excel templates (5.6)

#### Administration & Maintenance

- User Database Maintenance from Admin Portal (5.6)
- Admin Privleges and Roles extended (5.6)
- Gatekeeper administration centralized (5.6)
- BroadCast Client Messages
- Deployment improvements extended tool features incl. Tomcat/Webserver deployment

#### Multitenant Support

- New Platform architecture for MT support
- Provisioning portal commercial

#### **System Improvements**

• ZyDesk client call performance handling

#### System Interworking

- Queue handling via BroadWorks Routepoints
- New improved Cisco interworking
- Windows Client Secure tunnel
- Advanced SIP Trunk Selection (Country, Department, Company)

#### **Others**

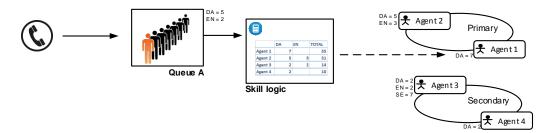
- WebOperator v1 commercial
- Calendar Forwarding & Spoken Absence for Lync/SfB
- Lync Web-Chat Customer plugin



### 2.2 New features

#### 2.2.1 Skill-based routing

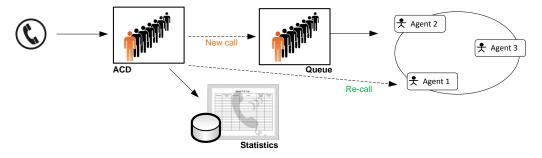
Skills can be associated to each agent to ensure that calls are firstly directed to agents with special knowledge. Skills can be any type of word indicating a certain skill and always has a value indicating the level of the skill.



If skill based routing is enabled on a given queue the system will first look for the agent in the primary group with the highest matching skill. If none are found, the secondary group will be searched and if none are found here the normal distribution method (e.g. Longest Idle) is used.

#### 2.2.2 Historical Routing

Historical routing makes it possible for the system to route calls/emails from the same person to the same Agent that handled the previous call.



For calls the A-number of the caller is used to identify the call – and if the previous Agent is still logged in, the call is routed to that Agent.

A limit for how long back historical routing should be considered for can be configured.

For e-mails the Historical routing functionality is used to ensure that an "email conversation" is possible. This is achieved either by the reference tags in the email header or by the mail address of the sender.

#### 2.2.3 IVR Menu – Prompt & Collect

In 6.0 a web-based IVR configuration can be used to configure IVR scenarios such as "Press 1 for sales, 2 for support.....". In previous versions this was only possible via IVR Scripts.

IVR Menu's are essentially always one-level IVR's with a number of IVR Actions. If multiple levels are needed one IVR action can point to another IVR menu. For date/time control the IVR action can point to a queue.

IVR MENUS	ENUS MainIVR							
Menu Setting	5:							
Name:	MainIVR	0	Number: 12345678	0				
Queue Type:	Zylinc Media Server	× 🕜						
Display Name	IVR for hovedenummer	0						
Type:	Prompt & Collect IVR	× 🕜	Language: - no change 🕑 🚱					
Announcemer	nt: - none -	<ul> <li>•</li> <li>•</li> </ul>						
IVR Prompt:	zylinc-main-ivr (da,en	) 🗸 🚱 🖻	Max.: 1 Timeout: 5	Attempts: 1	)			
IVR Actions:								
Default:	Digit Start:	Digit End:	Language:	Announcement:	Action:	Settings:		
	1		Danish 💌	- none -	✓ Queue Call	✓ Sales & Marketing ✓	Delete	
	2		Danish	- none -	✓ Queue Call	✓ Support ✓	Delete	
	3		Finnish 💌	- none -	♥ Queue Call	✓ Administration og Bc ✓	Delete	
V	4		German	- none -	✓ Queue Call	✓ Reception ✓	Delete	
Add Action					Queue Call Forward Internal Forward IVR Hangup Repeat this IVR		Save	

For very advanced IVR configurations Zylinc's script language can be used to make an unlimited number of IVR levels using time, A-number and other parameters as input. It is NOT recommended to use both the Web admin and the Script based IVR in the same installations.





#### 2.2.4 IVR Menu - A-number routing

A-number routing allows the system to handle a call in different ways dependant on the callers A-number.

A-number routing is configured as an IVR Menu but with the type "A-number based IVR", and as such the same features as explained in previous chapter is available. In the same way as one IVR action can point to another IVR menu, multiple A-number routing actions can also point to others.

IVR MENUS	VR MENUS MainIVR							
Menu Settings:								
Name:	AnumEval	0	Number: 12345679	0				
Queue Type:	Zylinc Media Server	<ul> <li>•</li> <li>•</li></ul>						
Display Name:	IVR for hovedenummer	0						
Туре:	A-number based IVR	× 😮	Language: - no change 💌 🚱					
Announcement	- none -	~ (c)						
IVR Prompt:	zylinc-main-ivr (da,er	n) 🗸 🕑 🕑	Max.: 1 Timeout: 5	Attempts: 1				
IVR Actions:								
Default: [	Digit Start:	Digit End:	Language:	Announcement:	Action:	Settings:		
•	1000	2000	Danish	- none - 👻	Queue Call	Sales & Marketing	Delete	
	2001	3000	German	zylinc-pls-enter-desti	Forward IVR	MainIVR	Delete	
Add Action								
							Save	

### 2.2.5 Call Recording

The solution now supports integration to external third-party recording systems.

If configured and installed, pressing the Record button in the client will initiate a recording of the current call on the external system. For some systems it is possible to store additional information about the call such as Agent ID, Queue name and a comment about the reason for the recording.

In 6.0 support for the following two thirdparties has been added:

- RecordIt
- BroadWorks

#### 2.2.6 Customer Surveys (third-party integration)

External support for Customer Surveys has been added in 6.0.

If Customer Survey has been configured in the solution this can be activated on a per queue basis. If activated the system will optionally prompt caller before they enter the queue and if accepted the Zylinc system will request the external Customer Survey system to dial the caller after the Agent disconnects.

In 6.0 support for the following thirdparty has been added:

- RecordIt

#### 2.2.7 Client BroadCast

A new feature on the admin portal now allows an administrator or user with the right privilege to BroadCast a message to all running clients including: ZyDesk and Mobile Clients.

The BroadCast will show a simple message on the device running these clients. This can for example be used by System administrators to inform their users about a new update or an abnormal situation.

A new privelege has been added to limit the access to this feature.

#### 2.2.8 ZyDesk Secure Tunnel

Release 6.0 adds support for connecting the ZyDesk client to the backend infrastructure via the internet. In previous versions it was assumed that the ZyDesk client was running on the same domain as the backend and databases.

A Secure Tunnel mechanism has been added to the ZyDesk executable and when configured correctly, ZyDesk can communicate from any network to the backend. The Tunneling Server will only allow access to authorized users and only to a list of whitelisted hosts and ports.

The tunnel is activated in the client by adding configuration in the zydesk.ini.

If the customer is running a Zylinc Mobile Operator solution the secure credentials can be Zylinc AutoConf server, otherwise they can be written in the zydesk.ini file.

Unless forcing use of the tunneling the client will first attempt to connect to the database. Only if the database connection fails will it resort to tunneling.

The firewall needs to be open from where the ZyDesk client connects from to the Tunneling Server. The Tunneling Server needs to be located on the same network as the Zylinc solution. If this is not possible the Zylinc Proxy / Zylinc Proxy Client can be added to carry the data from the DMZ to the Tunneling server on the LAN.



The parameters in the ini file are:

Key	Description
tunnelserveradr	Hostname of the tunneling server
tunnelserverport	Port the tunneling server is running on
forceusingtunnelserver	Do not attempt a direct connection before using tunneling
autoconfexponent	Exponent of the cryptographic key used by tunneling server
autoconfmodulus	Modulus of the cryptographic key used by tunneling server

#### 2.2.9 Deployment Manager

Manual installation and configuration of Java and Tomcat is no longer needed. The Deployment Manager can now be used to install or upgrade both Java and Tomcat. This includes generating a self-signed certificate and enabling the HTTPS connector on the Tomcat server.

When Tomcat based Zylinc modules are deployed via. the Deployment Manager, the SQL Configuration is deployed automatically. It is no longer needed to enter SQL host, database name, user, password and port manually for each single Tomcat module.

The configuration options that previously existed on special "configuration" pages in Tomcat for each module are now moved into the Admin Portal.

#### 2.2.10 XMPP Chat queues

Release 6.0 includes support for XMPP chat queues. The solution has been tested towards both Cisco CUP/Jabber chat queues and BroadWorks UC-One chat queues.

Note: The XMPP chat queue functionality is developed as a standard XMPP integration and will most likely work against any XMPP server but officially only Cisco and BroadWorks are supported.

XMPP Chat queue are configured in the same way as the existing Lync Chat queue functionality. A Chat queue is essentially a XMPP account and as such the chat queue needs to be configured with the Username and Password of the account.

CHAT QUEUES		XmppTes	tQueuePMN	BASIC   USERS   OPENING HOURS	
Basic Settings:					
Name:	XmppTestQueuePMN	0	User: test@zylinc.com	Password:	0
Queue Display Name:	Demo Chat Cisco (ms)	0	Colour Code: #B6FF9C		
Queue Type:	XMPP Chat	× 😮			

Furthermore the agent also need an account configured:

Agent - Other Channels				
Chat User (XMPP):	test1@zylinc.com	Password:	•••••	Default: 🗌 💡

Note: For BroadWorks systems the username and password are synchronized and can be used by selecting "Default". For Cisco XMPP chat queues the username and password must be entered.

jjj@zylinc.com/wbxconnect Demo Chat Cisco (ms)	01:05	Agent test	09:16	jjj@zylinc.com/wbxconnect & Demo Chat Cisco (ms)
♣ → 09:17:20	]	Agent Welcome, how may I help you?	09:16	
No Chat		Customer Not sure., just need more info	09:16	Find standard message Sen
No Chat		Agent Sorry but you got the wrong department	09:17	Welcome, how may I help you?
		Customer Are you sure	09.17	Please goto our web-site http://www.zylinc.com for I will connect you to our support department
No Chat		?	09:17	Thank you for contacting us
No Ghar		Agent Please goto our web-site http://www.zylinc.com for more	09:17	I have no clue about that question Sorry but you got the wrong department
		information		We support both Skype for business and Lync
No Chat				Yes Cisco is also supported I will transfer you to my colleague, please wait
No Chat	(			
No Chat				

XMPP Chat queues are currently limited to chat-only i.e. it does not support the Lync Chat queue – escalate to Voice/Video/Screensharing etc.

#### 2.2.11 ZyDesk Caller Data extensions

A number of improvement has been made to how ZyDesk presents calls waiting in queues and active calls. These improvements include support for new data from ZyCore ID including Priority, Customer ID and Customer Segment.

Settings		- ×	Waiting Time	Queue	Caller Number	Caller Name	Stat	us H	istory
Introd in Audo Automatical States in Constant in Cons	Active Call Information  Active Call Information  Congramy  Congramy  Congramy  Congramy  Congrams Callback Information  Congrams Callback Information  Congrams Callback Information  Person  Person  Person  Person  County Call Phone Type County Call Code Address	Company V Trie Ocompany Ocompany Oconstrained Oconstr	Wating Time	Gueor	Catler Number	Icatter Name		us (H Calde Nutroter Caller Address Caller Number Caller Number Caller Number Caller Number Customer ID Customer Informa History Customer Informa History Diotofy Diotofy Customer Informa History Customer Informa History History Customer Informa History Customer Informa History Customer Informa History History Customer Informa History	

Active Calls Configuration

Incoming calls column selection

Send message templates, configurable in the language files, has also been extended with several tags to allow more data to be added to the autotext templates. These tags are:

- [customerId]
- [customerInfo]
- [info]
- [priority]
- [title]



#### 2.2.12 Agent select A-number on outgoing call

A new feature in ZyDesk allows (if configured) an Agent to select a Queues A-number before dialing out:

	Subscribed queues		٧
	Personal queue	0	
	Demo AC (35294886) 2(+1) Agents	0	^
	Demo CC (88336641)  3 Agents	0	
	Demo Chat Cisco (ms)	0	
Calling as 88336641 (Demo CC (88336641))	Demo Facebook (Zylin 1 Agent	0	
Reset Caller ID			~

If nothing is selected default setting on the Agent will apply.

### 2.3 New and extended interfaces

#### 2.3.1 BroadWorks Routepoints

In previous versions all installations needed the Zylinc Media server module in order to handle advanced Call functionality. In 6.0 the Zylinc system can integrate via BroadWorks routepoint to a BroadWorks R20 system or higher.

Zylinc recommends to use Routepoints in Multitenant installations. Using Zylinc media server is often a more simple setup requiring less provisioning on the BroadWorks platform and as such this deployment is still recommended on Singletenant and POC installations.

	Single Tenant	Multi Tenant
Architecture	One-2-One architecture serving one company	More complex architecture supporting many companies
Infrastructure	Two Virtual servers • Zylinc Media Server • Zylinc Windows Application Server • MS SQL Server • Integration Software	<ul> <li>x no. of Virtual Servers in an Application Pool</li> <li>Zylinc Windows Application Server with MT pack</li> <li>One Microsoft SQL-server cluster</li> <li>Windows Server</li> <li>On Master Portal server</li> <li>Windows Server</li> </ul>
BroadWorks Integration Requirements	<ul> <li>XSI for Presence and Profile control</li> <li>SIP Trunk or SIP UA for media control</li> </ul>	<ul> <li>XSI for Presence and Advanced Media control</li> <li>BroadWorks routepoints platform license</li> <li>BroadWorks CC Agents</li> <li>FTP/SSH access for media upload</li> </ul>
Media Integration	Voice traffic are routed to the Zylinc media server when customer is placed in a queue and tromboned back into operator network	Voice traffic is preserved in the Broadworks Environment during queue management
Target Segment	Enterprise hosted Cloud POC Cloud large installations	Cloud solutions (10+ Enterprises)

To use BroadWorks Routepoint the following must be available:

- CTI connection to a BroadWorks R20 or higher
- BroadWorks Routepoint Platform license available

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- Each Agent/Endpoint must be a BroadWorks CC Premium profile

### 2.3.2 BroadWorks Enterprise model

The BroadWorks system are usually deployed in one of the following two models:

- 1) Group Model
- 2) Enterprise Model

In previous versions only the Group model was supported. From 6.0 it is now possible to also select the Enterprise model.

For more information on this please refer to the BroadWorks documentation.



#### 2.3.3 Support for mixed directory environment (AD, Domino, .csv)

In previous releases Directory and Calendar information had to come from the same sources, i.e. if the Enterprise used Exchange/Outlook, directory information had to be read from AD and if the Enterprise used Lotus Notes, directory information had to be read from Domino Directory.

In 6.0 the Zylinc solution now supports mixed environments as it is possible to specify which system has priority for both user and for calendar if a user is found in both systems:

User Data Mapping:	Email Address	× 😮	User Priority Domino Directory	× 0	Mail Priority Exchange	~ <b>(</b> )

Furthermore it is possible to import data for existing users via .csv files where in previous versions only new users could be added in this way. CSV imported data (which is not empty) will always overwrite data imported from Active Directory or Domino.

#### 2.3.4 Advanced SIP Trunk Selection

Release 6.0 adds more feature to select different SIP trunks depending on the number called:

- Country: Allows a mapping table between SIP trunks and Country prefixes to be configured
- Department: Allows a mapping table between SIP trunks and Department of the called user (if a department is stored in the database)
- Company: Allows a mapping table between SIP trunks and Company of the called user (if a department is stored in the database)

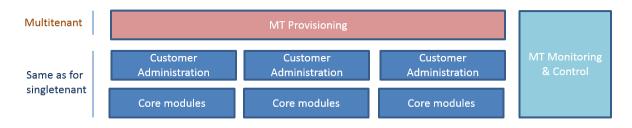
Country Mode:					
				Selected Country/Trunk	
Selected Country:	Not Selected	v 😮	•	Denmark/estation	^
Selected SipTrunk:	cacofonix	V	+		~
Department Mode	:				
				Selected Department/Trunk	
Department:		0	•	Development/estation	<u>^</u>
Selected SipTrunk:	cacofonix	*	+		
					$\sim$
Company Mode:					
				Selected Department/Trunk	
Company:		0	•	Zylinc/estation	^
Selected SipTrunk:	cacofonix	*	+		
					$\sim$

### 2.4 New products

#### 2.4.1 Multitenant

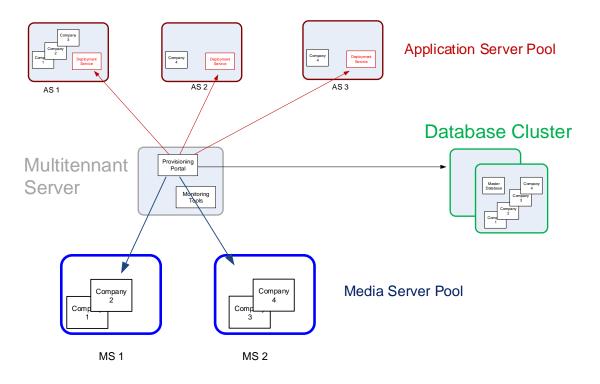
Release 6.0 includes support for multitenant configurations of the Zylinc solution.

The core software modules are the same in both Single- and Multi-tenant configurations and as such, the end-user feature-set is identical. The MT deployment simply adds a Provisioning and Tenant Control layer on top of the software as illustrated in the picture below:



Even in a Multitenant architecture, it is possible to upgrade or run some tenants on one version and others on a different version of Zylinc software. The MT provisioning layer ensures that all tenants are controlled and administrated as one platform.

In a multitenant setup a windows service instance of all modules are dedicated to a given customer and runs on a assigned Application Server as illustrated in the following figure:



Multitenant installations requires a special License File and agreement with Zylinc. For more information please contact Zylinc.



#### 2.4.2 Web Operator

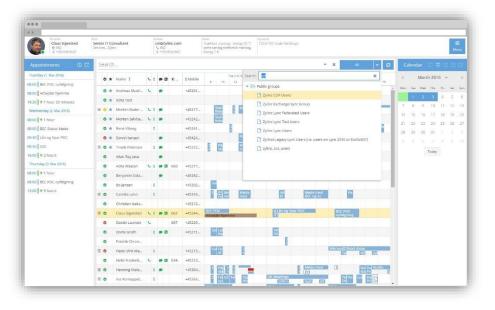
Release 6.0 officially introduces the new product Web Operator.

Web Operator is a Browser version of Zylincs Operator which is today available as a Windows Application.

Web Operator is deployed as a .war installation file on the Tomcat server.

The solution contains features for:

- 1. Quick overview of colleagues' availability.
- 2. Automatic calendar update with absence functionality.
- 3. Absence function with user customizable preset subjects such as: "In a meeting", "Holiday" etc.
- 4. Automatic forward of calls
- 5. Send text messages directly from ZyDesk Operator to a user's telephone.
- 6. Call Action



#### 2.4.3 Forwarding for Skype-for-Business

The existing forwarding solution has been extended with Forwarding for Lync and Skype for Business.

This means that Zylinc now also for Skype-for-Business supports:

- Calendar Based forwarding
- Set/Cancel forwarding from ZyDesk
- Set/Cancel forwarding from Admin Portal

Due to the improved support for multi-PBX installations the Admin Portal forwarding page will now show both users with Cisco, BroadWorks and Skype-for-Business phones. Only the users primary devices will be available.

In ZyDesk for example a Lync/SfB user can now set Forwarding for other Lync/SfB user, and Cisco users can set forwarding for other Cisco users. Setting forwarding across telephony systems is currently not supported.

# **3 Modules**

### 3.1 Overview

The following table shows the different modules in the system:

Core	Integration (3rd party)	Add-on
Media/ Call Control	BroadWorks	Calendar - Syncs
• Switch Image (new 6.0 iso file)	<ul> <li>BroadWorks Directory Sync</li> </ul>	Exchange Sync WS
Queue Manager (former Switch Proxy)	BroadWorks User Proxy	Domino Sync
	(former BroadWorks Presence)	<ul> <li>Domino Server (absence)</li> </ul>
Portals	<ul> <li>Broadworks Queue Handler (Beta in 6.0)</li> </ul>	<ul> <li>CalDAV Sync (Google)</li> </ul>
Admin Portal		
Statistics Portal (new GUI 6.0)	Cisco	Lookup
	<ul> <li>Cisco Directory Sync (new 6.0)</li> </ul>	ZyCore ID
Database	<ul> <li>Cisco User Proxy (new 6.0)</li> </ul>	
<ul> <li>Deployment Manager</li> </ul>	(Replaces old Cisco Integration Modules)	Mobility/ Messaging
		<ul> <li>Mail Queue Handler</li> </ul>
Event Bus	Lync	<ul> <li>XMPP Queue Handler (new 6.0)</li> </ul>
• ZyGo	Lync User Proxy	<ul> <li>Messaging Portal (former SMS Portal)</li> </ul>
	<ul> <li>Lync MSPL Manager</li> </ul>	
Client	<ul> <li>Lync Chat Queue handler</li> </ul>	Portals
<ul> <li>ZyDesk Framework</li> </ul>		Wallboard
<ul> <li>Mobile Operator/ Agent</li> </ul>	Presence (others)	DataServices
Web Operator	<ul> <li>Mobile Presence Adapter</li> </ul>	Tunnelling Server
<ul> <li>EventBoard</li> </ul>	SIP User Proxy (former SIP user Agent)	
	Sametime Adapter	Advanced Forwarding
Diagnostic and Reporting	<ul> <li>XMPP User Proxy (former XMPP Presence)</li> </ul>	<ul> <li>Forwarding Server</li> </ul>
Service Manager		
	Enterprise Directory	Mobile Backend

#### Authentication

Authentication Server (new 6.0)

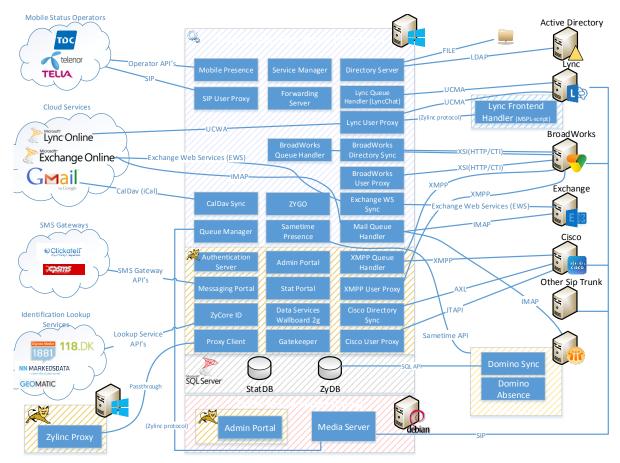
- Directory Server
- ZyDomino

- GateKeeper
- Zylinc Proxy (former Gatekeeper Proxy)
  Zylinc Client Proxy



## 3.2 External interface

The following figure illustrates the external interfaces in the system.



### **3.3 Changed Modules**

6.0 is a major release, and therefore all modules mentioned in previous chapter have modifications and changes, and should be updated/replaced.

### 3.4 New Modules

#### 3.4.1 Cisco Directory Sync

The Cisco Directory Sync implements the directory synchronization behavior of the previous ZyCore Device Module. The CDS module has been introduced to align with integration to other systems (SfB and BroadWorks) where the synchronization part is a separate module to the Call Control and presence part.

#### 3.4.2 Cisco User Proxy

The Cisco User Proxy replaces the Call Control and presence functionality previously implemented in ZyCore Device and CUCM Event Bridge. The Cisco User Proxy has been introduced partly to align with integration to other PBX'es but primarliry to simplify the integration to Cisco into only one module.

#### 3.4.3 BroadWorks Queue Handler

The BroadWorks Queue Handler is required in installations where BroadWorks routepoints are used. This module handles all communication and logic between the Queue Manager and the BroadWorks system.

#### 3.4.4 Tunneling Server

New module required when ZyDesk must use the new 6.0 feature for Secure Tunneling.

#### **3.4.5 Remote Server Control**

New module needed by the BroadWorks Routepoint functionality for communication between Admin Portal and Service Providers FTP upload server.

#### 3.4.6 Statistics Portal

A new Statistics Portal is delivered in 6.0 release. The Statistics Portal replaces the old portal which is no longer valid.

The statistics portal is split into 5 subpages:

- KPI's
- Export
- Logs
- Personal
- Settings



Zy Statistics Portal	≡ KPI'S								Troels Pet	ersen 🕞 🎯
🚯 KPI's	Queues Users								8 M	arch - 8 March (1 Daj
LIII Export	KPI data for: Today	This Week This Month	This Year	Other 🔫					Tota	Calls Avg Hand
🗁 Logs	Users			Calls			Total Tal	Avg. Ha	Handlin	
			Incoming Answer	Incoming Unanswered	Outgoing	Total			First Response	Transfer Failed
🛓 Personal	Bo Jensen		0	0	0	0	-	-	-	-
	Camilla Lehn		0	0	0	0				
Settings	Fredrik Chronqvist		0	0	0	0			-	
	Hans Ulrik Madsen		0	0	0	0	-	-		
	Helen Patterson		0	0	0	0	-	-	-	
	Helle Frederiksen		66	4	39	109	00:32:51	00:00:19	64%	2.0
	Helle Test 1		11	2	2	15	00:02:47	00:01:09	100%	
	Henning Nielsen		0	0	0	0	-	-	-	
	Ina Pontoppidan		0	0	0	0	-	-	-	
	Jesper Juul Pedersen		1	0	0	1	00:00:19	00:00:19	100%	
	Jytte Laursen		0	0	0	0	-	-		
	Troels Petersen		3	4	0	7	00:00:42	00:00:06	100%	
	Grand Total (13)		81	10	41	132	00:09:09	00:00:28	91%	2.0

The portal has been optimized for performance and user friendliness.

New updated Excel templates are also available in this release. They can be downloaded directly from the portals "Settings" page.

#### **3.4.7 Authentication Server**

A new authentication server has been added in this release. This server is used for all user authentication (except the Administration Portal, which will continue to do its own authentication, and the GateKeeper, which will start using the Authentication Server in a future release).

#### 3.4.8 Multitenant Portal

The Multi-tenant Portal is a new module required in a Multi-tenant Installation.

The MT Portal is a Tomcat service similar to the Admin Portal. From the Multitenant Portal all administrative task between tenant are handled.

					Logout tp@z	zylinc.com   Mul	ltitenant Portal Version 1.1.35	-		
TENANTS	SERVERS	USERS	SERVICES	ADMINISTRATION						
Servers										
Application Server				RATING				Logo	t zylincadmin	Multitenant Portal
Name			TEN	NITS SERVERS	USERS	SERVICES	ADMINISTRATION			
AS1 (Application Server	#1)		1270	ANTS SERVERS	OBERS	SERVICES	ADMINISTRATION			
			Temple	ates - Configuration						Upload a template
Multitenant Server			Adm	inistration Portal Setup						
Name			Not sele	ectable 📃						
MasterApplicationServer	(Master Application Server)		Name		<ul> <li>Display name</li> </ul>	٠			Default	
			All En		All Enabled					
				Norks only	Broad/Vorks only					<b>H \$</b>
SQL Server			Test A	dministration Portal Setup	Test Administration Portal Setup					<b>B</b> \$
Name										
SS1 (SQL Server #1)				al System Configuration						
			Not sele	ectable						
			_	uration Template	Display name     Configuration Template	<ul> <li>ZyDI</li> <li>18.19</li> </ul>	B version	Feature sets Bread/Violics, Clisco, Rolas, Calendare, Absenca Templates, Appointme Categories, Caller Loakup	Default	B \$
										Save

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### **3.5 Obsolete Modules**

### 3.5.1 ZyCore Device

This module is no longer needed as its functionality is incorporated into the new Cisco User Proxy.

#### 3.5.2 ZyCore Device Proxy

This module is no longer needed as its functionality is incorporated into the new Cisco User Proxy.

### 3.5.3 CUCM Event Bridge

This module is no longer needed as its functionality is incorporated into the new Cisco User Proxy.

#### 3.5.4 XMPP Adapter

This module is no longer needed as it has been replaced by the new XMPP User Proxy



# **4 Upgrade Notes**

The following chapter describes the most relevant issues to be aware of when upgrading from a previous version of Zylinc Product Suite. The list is <u>not</u> comprehensive.

Note: Users upgrading from versions before 5.5 are strongly recommended to also read the Upgrade Notes from Zylinc 5.5.

### **4.1 Network Changes**

#### 4.1.1 Port Changes and new interfaces

All internal interfaces in the solution now has a new default port.

This has been done to align and automate port allocation in a multitenant solution and to ensure no modules uses the Windows dynamic portrange.

ZyDesk now communicates with the Cisco User Proxy on default port XYZ.

### 4.2 Platform Changes

#### 4.2.1 Windows logfiles

To align Zylinc modules on the windows server a number of modules are now storing logfiles in a different place than in 5.5.

For Windows services logs are now stored in:

• C:\ProgramData\Zylinc\\$Module name\$\\$Version\$\\$Module name\$\log

For Tomcat modules logs are now stored in:

• C:\Program Files\Zylinc\ApacheInstances\\$Tomcat instance name\$\logs\\$module name\$.log

### 4.3 Gatekeeper settings

In previous versions the Gatekeeper used settings that was configured via the Gatekeeper portal and was stored locally in properties files. These settings include:

Juggle call timeout:	Admin Portal / Network / Mobile Status / Notification Latency
Internet Port	Admin Portal / System / Interface Configuration
LAN Port	Admin Portal / System / Interface Configuration
Huntgroup general availability control	Admin Portal / System / Mobile & Web Operator
Android Client Version	Admin Portal / System / Mobile & Web Operator
Android Update URL	Admin Portal / System / Mobile & Web Operator
Activate Target Host	Not moved, see http://x.x.x.x:8080/GateKeeper/
Activate Activation Code	Not moved, see http://x.x.x.x:8080/GateKeeper/

In release 6.0 these settings has been moved to the Administration Portal under "Web/Mobile Operator" and "Mobile Presence". The LAN port and WAN port are moved to "Interface configuration".

Since the settings previously were stored locally they must manually be re-entered on the administration portal after an upgrade.

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### 4.4 BroadWorks Support

Support for several new BroadWorks scenarios has been added in release 6.0.

- BroadWorks Enterprise model
- BroadWorks Mobile Only
- BroadWorks Routepoint (Queue Handler)

The BroadWorks configuration page should thus in an upgrade scenario be checked that it still contains the right settings.

## 4.5 ZyDesk Profiles

#### 4.5.1 Active Call information

In previous versions the information displayed in Active Call information was fixed, i.e. first line was displayname (if available), next line the QueueName and so on.

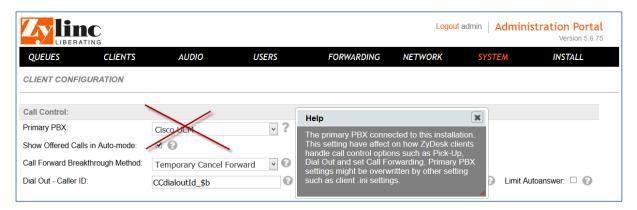
In the 6.0 release information in the Active Call window is customizable on the profile itself – both in terms of what is shown and on what line. Furthermore a number of new information fields such as priority and caller address are now possible to show.

Upgraded installation with existing profiles will show Zylincs default settings which might be different from what was shown before – especially if custom mapping between data has been made in for example ZyCore ID lookups. It is thus recommended to take a screenshot of the window before and after the upgrade and configure the Active Call window accordingly.

## 4.6 User and Agent Settings

#### 4.6.1 Mixed PBX environments

In previous releases the setting "Primary PBX" decided what type of integration was used for PBX Call Control for all users.



Release 6.0 now supports mixed PBX environments, i.e. for each user it is possible to choose which type of Call Control is used. The User setting section has thus been split up into two – one for "User (Operator)" and another for the "Agent".



AGENTS	Helen Patterson (zhp@zylinc.com)					SET	TINGS   MEMBERSHIPS	PRIVILEGES   QUEUES	
User (Operator):									
Device:	BW Deskphone	× 0	ID:	zylincuser04@zylinc.hvoip.dk	0	Number:	+4533590614	0	Default: 🗹
Agent - Incoming Calls:									
Device:	BW Deskphone	× 🕝	Default Type:	Zylinc Media Server	۲ 🕜	Default: 🗆			
Media Server Number:	Shortnumber (614)	>	Extension:	614	0	SIP Trunk:	cacofonix	× 🚱	

Changing this is controlled by the privilege "User – Change Phonetype" and for normal users it is recommended not to assign this privelege.

For installations with only one Queue Handler (most installations) less options should be available.

ZyDesk would in previous versions only allow setting/cancelling forwarding and show line-state for users that matched the "Primary PBX" setting. In 6.0 it is the "Device Type" of the logged in Agent/User that decides for which users forwarding can be set and presence shown, i.e. Cisco users can only set forwarding for other Cisco users, and Lync/SfB users can set for other Lync/SfB users.

#### 4.6.2 Forwarding

Support for Lync/SfB Forwarding has been added in 6.0 and to support mixed PBX environments the "PBX Type" setting in the forwarding section is no longer used. Instead the forwarding feature will use the user PBX type as specified in previous chapter.

### 4.7 Roles and access

#### 4.7.1 Priveleges

New Priveleges has been introduced on the administration portal:

- User Skills Full Control
- User Skills Add/Remove
- User Change Phonetype
- Client BroadCast Allowed
- Queue Survey
- Queue IVR Menu & Actions Add/Del/Modify
- Queue IVR Menu & Actions Modify
- Queue IVR Action Modify
- Queue Administrate Member Queues
- Queue Skills Full Control
- Queue Skills Add/Remove
- Queue Queues Directory ID
- Queue Social Media Queues (beta)
- Queue Caller Rated Routing
- Statistics View All Users

All of the above priveleges needs to be added to existing profiles if required – except for the "Queue – Administrate Member Queues" Privilege (see next chapter).

The following existing priveleges has been renamed:

- Stat All Data => Stat Access
- Queue View All Queues => Admin/Stat all Queues

#### 4.7.2 ZyDesk Authentication

With the new authentication ZyDesk will no longer support the legacy "Windows Authentication" login method used up until this release due to security concerns. Instead users can log in using either the ZyDesk password or their system password. This can be remembered by the client so it only has to be done once.

#### 4.7.3 Security Groups

The security group concept in release 5.5 has been extended with a **Supervisor** security group. This group is intended as a common group for features that typically applies to supervisors and often is limited to a group of users. In 6.0 the **Supervisor** security group allows a user to:

- Login/logout other users of BroadWorks Huntgroup in ZyDesk

#### 4.7.4 ZyDesk License

Starting Release 6.0 ZyDesk will check out licenses from the Service Manager. This happens via a persistent connection to the GateKeeper. This interface uses the existing connection between clients and GateKeeper configured as "Gatekeeper LAN Port" on the admin portal.

#### 4.7.5 Stat Portal Access

With the introduction of the new Stat Portal access to the portal has been changed. The ZyDesk role no longer effect what is visible for users and a new role for limiting what users are visible has been added:

User	Privilege	Authentication	Queues	Users	Sections	Delete Queues/ Deleted Users
Tomcat Admin		Tomcat Role	All	All	All reports Settings	Show all
ZyDesk User		AD (if configured) ZD PW (if allowed)	none	none	Personal Page	-
ZyDesk User	Stat All Data	AD (if configured) ZD PW (if allowed)	Limited	All	All reports Personal Page	Admin Setting
ZyDesk User	Stat All Data View All Queues	AD (if configured) ZD PW (if allowed)	All	All	All reports Personal Page	Admin Setting
ZyDesk Supervisor	-	AD (if configured) ZD PW (if allowed)	Limited	All	All reports Personal Page	Admin Setting
ZyDesk Admin	-	AD (if configured) ZD PW (if allowed)	All	All	All reports Personal Page	Show all

#### Release 5.5 Stat Portal

#### Release 6.0 Stat Portal

User	Privilege	Authentication	Queues	Users	Sections	Delete Queues/ Deleted Users
Tomcat Admin		Tomcat Role	All	All	All reports Settings	Show all
ZyDesk User	-	AD (if configured) ZD PW (if allowed)	none	None	Personal Page	-
ZyDesk User	Stat Access*	AD (if configured) ZD PW (if allowed)	Limited	Limited	All reports Personal Page	Admin Setting
ZyDesk User	Stat Access* Admin/Stat All Queues*	AD (if configured) ZD PW (if allowed)	All	Limited	All reports Personal Page	Admin Setting
ZyDesk User	Stat Access* Admin/Stat All Queues* View All User**	AD (if configured) ZD PW (if allowed)	All	All	All reports Personal Page	Admin Setting

\* Renamed privilege \*\* New privilege



### 4.8 Administration Portal

#### **4.8.1 Portal Configuration**

The Portal configuration (i.e. which pages are visible) was previously stored as a properties file on the server where the portal was running, which meant that if the portal was installed on several servers they might look different.

In 6.0 the configuration is persisted in the database and as such all portal has the same configuration.

#### 4.8.2 Queue visibility

In previous version a user with access to the admin portal would have access to all queues he was either a member or an owner of. The privilege "View All Queues" would give him access to all queues.

In 6.0 a user by default now only has access to queues where he is defined as Owner. Two priveleges can overwrite this:

- Admin/Stat All Queues: gives access to all queues (as in 5.5)
- View Member Queues: gives also access to queues he is either primary, secondary or standby

Note: The new privilege "Administrate Member Queues" are during upgrade given to all existing roles as this privilege was implicitly given in previous release.

#### 4.8.3 Windows Deployment

In previous releases the portal would store its database connection in a common place on the Windows Server. To support multiple versions running on the same server (with the same name) the database connection properties file is now stored in a folder named after the version.

This means that if the .war file is deployed via the Tomcat Manager the database connection settings must be re-entered. It is therefore recommended to always deploy via the Deployment Manager.

#### 4.8.4 Naming

In previus versions both a cc-admin.war (for the Media Server) and a zylinc-admin.war (for the windows server) was delivered.

In 6.0 the Admin Portal autodetects the Operating System and as such only one .war file is included in the package – zylinc.admin.war.

### **4.9 Cisco Integration**

#### 4.9.1 Cisco Settings

The old modules ZyCore Device and CUCM Event Bridge are now replaced by Cisco User Proxy and Cisco Directory Sync.

The settings in the legacy ZyCore Device property file are now moved to Admin Portal / Network / Cisco Presence, and should be migrated manually.

The legacy XML settings in the Admin Portal for the CUCM Event Bridge should also be manually migrated into Admin Portal / Network / Cisco Presence.

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#### 4.9.2 Cisco Limitations in 6.0 GA

In 6.0 GA support for filtering of users are not included. In previous versions it was possible to only synchronize/import a subset of users on the CUCM to Zylincs database. This is currently not supported and as such ALL users will be included in the sync.

In 6.0 GA only one CUCM provider can be configured, i.e. no support for CUCM JTAPI failover is currently available.

Note:

Due to the above limitations it is recommended NOT to upgrade Cisco installations that requires either a subset or requires Provider/Subscriber failover for presence. An update to 6.0 that covers these limitations are expected latest July 2016.

### **4.10 Statistics Portal**

#### 4.10.1 New Portal

The new Statistics Portal replaces the old with the same name.

The portal has been re-developed from scratch and as such some features or the behavior thereof might be different. The goal has been to port the old statistics portal one-to-one but in several areas improvements has been made. The main differences are:

- Authentication has been changed and new privileges allows more logical control
- The old "Summary" page has been replaced with a new "KPI" page that includes key numbers for both users and queues
- Personal Statistics has been re-defined
- Export to .csv or .dsv is now a user setting
- Scheduled export now supports windows authentication

The new portal also includes the Excel Templates. They can be downloaded under "Settings=>Other Settings". In previous versions these templates had to be downloaded from Zylinc partnerwiki.

#### 4.10.2 Scheduled export configuration

The scheduled export configuration has been redefined. There is now only one location for all types.

In previous versions the system user that started the tomcat/stat portal was required to have write rights to the location. In 6.0 optionally a user/password can be defined.

Auto Export .csv:				
Export Location:	\\zyshare04\Pub	olic\StatExport 🕜 User:	Password:	0
Keep old:	<ul><li>✓</li><li></li></ul>			
User Report:	✓	Name: UserStatistics	0	
Queue Report:	✔ 🕜	Name: QueueStatistics	0	
User State Report:	✔ 🚱	Name: UserAggregatedState	Ø	

### 4.11 Multiple Queue Handlers

In previous versions only Zylinc Media Server installations was supported.

Release 6.0 adds BroadWorks Routepoint integration where the BroadWorks mediaserver is used instead of Zylinc Media Servers.



Release 6.0 also adds two different Chat Queue Handlers; XMPP or Lync/SfB. It is possible to mix multiple handlers in the same installation.

To support installations with both types of integration the concept of mulitple queue handlers has been added. If an installation only has one type no difference will be noted on the portal.

# **5 Thirdparty support & interworking list**

The following list shows third party systems officially supported by Zylinc software.

The solution might still work against other systems and might have been tested so please contact Zylinc Support if the system you are looking for is not on the list.

#### Green font indicates Zylinc's recommended versions.

	Zylinc Server	Zylinc PC Clients	Zylinc ZyMobile
Operating System	Windows 2008R2	Windows 7 / .NET4	Android 2.3 to 5.1
	Windows 2012R2	Windows 8	IOS 7.0 to 8.1.0
		Windows 8.1	
		Windows 10*	
<b>L</b>	·	* Known scalability issues	

 VMware
 Microsoft
 Others

 Server Virtualization
 vSphere 4.x
 HyperV 2008R2
 VirtualBox 4.x

 vSphere 5.x
 HyperV 2012R2
 VirtualBox 4.x

	Microsoft
Database integration	SQL Server 2008R2 (Express, Standard, Enterprise or Datacenter)
	SQL Server 2012 (Express, Standard, Enterprise or Datacenter)
	SQL Server 2014 (Express, Standard, Enterprise or Datacenter)

	Microsoft	Mozilla	Google
Internet Browsers	Internet Explorer 10	Firefox 40 to 46	Google Chrome 40 to 50
	Internet Explorer 11		_

Green font indicates Zylinc's recommended versions.

	Cisco	BroadWorks	Microsoft
Line State and Call	CUCM 7.x	R17, R18, R19, R20, R21	Lync 2010
Control Integration	CUCM 8.x	(xsi2)	Lync 2013
_	CUCM 9.x		Skype for Business
	CUCM 10.x		
	CUCM 11.x		

	TDC DK/NO/SE	Telia DK/FI	Telenor DK	Telenor NO	Ainacom FI
Mobile Presence	MobilFlex Connect Scale Mobil	Brobiz/Mobiz Telia Sonera Fl	Statusplan v2	Mobilt Bedriftsnett	Mobile Status

	CP SMS	Click-A-Tell	
SMS Gateways	Compaya SMS Gateway	SMS Gateway	
	www.cpsms.dk	www.clickatell.com	

	Microsoft	IBM	Google
Calendar integration	Exchange 2007	Domino 6.x	Enterprise Calendar
	Exchange 2010	Domino 7.x	-
	Exchange 2013	Domino 8.x	
	Exchange Online (o365)	Domino 9.x	

	Microsoft	IBM	Cisco	Google	XMPP
IM Presence	Lync 2010	Sametime	CUP 8.6.x	Hangouts	Generic
integration	Lync 2013	8.5.x	CUP 9.1	-	
-	Skype for Business				
	Office 365*				
	*Limited number of users s	supported		1	

	Microsoft	BroadSoft	Cisco
UC Client integration	Lync 2010	BTBC 21.x	Jabber 9.0.x
_	Lync 2013		Jabber 9.0.x
	Skype for Business (2013)		Jabber 10.0.x
	Skype for Business (2016)		

\*Only support for initiate chat

# 6 Hardware & Software Requirements

### 6.1 Workstation

ZyDesk 6.x minimum requirements:

- Windows 7, 8 & 8.1
- Resolution minimum 1366x768
- Microsoft .NET Framework version 4.0 installed
- Available disk space 100 MB
- 4GB RAM

### 6.2 Server

Please consult Zylinc online documentation for Server hardware and software requirements.

