

Release Note





Document Version 1.4

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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
- Web Operator
- Web Directory release 6.0u2

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.

Unless otherwise stated features mentioned in this document were available for 6.0 GA.

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)
- vCard/contact info send via mail or SMS (6.0u2)

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 Reason Codes categories (6.0u2)
- Supervisor listen-in/barge-in/whisper (6.0u2)
- Wrap-up timer on outgoing AC,SC,CC calls (6.0u2)
- Mail editor improvement e.g. signature, reply format, HTML (6.0u2)
- Transfer improvements Hold- and VM-Transfer, Consultant CB-Transfer (6.0u2)

Web Applications

- Web Operator BroadWorks Huntgroup control (6.0u2)
- Web Directory, new product (6.0u2)

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 Distribution / VIP Distribution (5.6)
- Caller Rated Queueing (6.0u2)
- ID Lookup support for direct .csv lookup (6.0u2)

Multichannel Functionality

- Chat queues via XMPP (BroadWorks & Cisco)
- Mail BCC support for CRM integration on mail queues (6.0u2)
- Support for SMS queues via external Sms2mail GW (6.0u2)

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, Directory and Presence

- 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
- SIP Simple support for Fixed+Mobile setups (6.0u2)

CRM Integration

Zendesk ticket integration (5.6)

Wallboard & Statistics

- Stat Portal 6.0 new portal
 - o Completely New look and feel
 - Much faster generation 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 Privileges 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
- MT Zylinc Media server support (6.0u2)

System Improvements

• ZyDesk client call performance handling

System Interworking

- Voice queue handling via BroadWorks Routepoints
- New improved Cisco interworking
- Windows Client Secure tunnel
- Advanced SIP Trunk Selection (Country, Department, Company)
- SIP Auto-answer support for generic IP-Phone control (6.0u2)

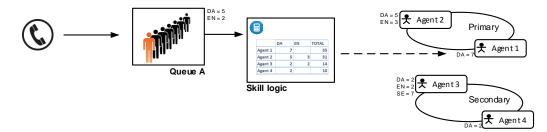
Others

- 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

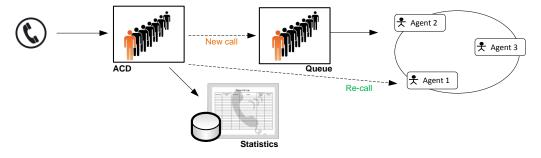
Skills can be associated to each agent to ensure that calls are firstly directed to agents with special knowledge. Skills can be any type of word indicating a certain skill and always has a value indicating the level of the skill.



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 Menus 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	VUS MainIVR						
Menu Settings:							
Name:	MainIVR	0	Number: 12345678	Ø			
Queue Type: Display Name:	Zylinc Media Server	⊻ ©					
Туре:	Prompt & Collect IVR		Language: - no change 👻 🚱				
Announcement	zylinc-main-ivr (da,er	✓ 🕜 1) ✓ 🕜 ⊙	Max.: 1 Timeout: 5	Attempts: 1			
IVR Actions:							
	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
Add Action	4		German 💌	- none - 🗸 🗸	Queue Call	Reception 👻	Delete
					Forward Internal Forward External 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 dependent on the callers A-number.

A-number routing is configured as an IVR Menu but with the type "A-number based IVR", and has as such the same features as explained in previous chapter 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	NR MENUS MainIVR						
Menu Settings	:						
Name:	AnumEval	0	Number: 12345679	0			
Queue Type:	Zylinc Media Server	 • •					
Display Name:	IVR for hovedenummer	0					
Туре:	A-number based IVR	× 😮	Language: - no change 🔽 🚱				
Announcement	: - none -	 G 					
IVR Prompt:	zylinc-main-ivr (da,er	1) · · · · · · · · · · · · · · · · · · ·	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 privilege 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.

Zylinc Media server updates is now also deployable though the Deployment manager (before it was carried out though the Administration Portal). A new 'Media Server' deployment page have been added to the Deployment Manager GUI, whereas you can: view deployed components, deploy a new component and remove a component from the Zylinc Media server. It is also no longer required to manually execute a rewrite config when deploying a new aConf Zylinc Media server update, as the deployment manger will take care of this automatically.

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		XmppTestQueuePMN				BASIC USERS OPENING HOURS
Basic Settings:						
Name:	XmppTestQueuePMN	0	User: test@zylinc.com	0	Password:	0
Queue Display Name:	Demo Chat Cisco (ms)	0	Colour Code: #B6FF9C 🕢			
Queue Type:	XMPP Chat	· 0				

Furthermore the agent also needs an account configured:



Agent - Other Channe	le		
Agent - Other Channe	(15		
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.

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.

jjj@zylinc.com/wbxconnect Demo Chat Cisco (ms) ▲	01:05	Agent test	09:16	jjj@zylinc.com/wbxconnect	
		Agent Welcome, how may I help you?	09:16		
		Customer Not sure just need more info	09:16	Find standard message	Send
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.zyl I will connect you to our support departme	
No Chat		?	09:17	Thank you for contacting us	
No Chat		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	e wait
No Chat					
No Chat					
Receive More Chats				Choose recipient	er End

2.2.11 ZyDesk Caller Data extensions

A number of improvements have 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		<u>-</u> ×	Waiting Time	Queue	Caller Number	Caller Name	Stat	tus Histor	1
Interface Audio Knowledge Base Audio Knowledge Base Operator Operator Undie Presence Search Solution Search Shortute Santup Sutup Auror Call Momenton Follow me Lookup Done Time	Active Call Information Active Call Information Corpany Corp	Company Title Company Company Department Organization Country Che Address OK Cancel Apply				No cells in gueue		California California	
	Active Calls Configuration			Incomina	calls c	olumn select	tior	۱	

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:

[customerld]

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

2.2.12 Agent select A-number on outgoing call

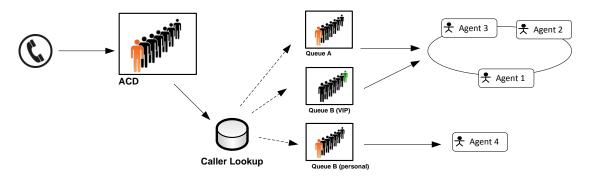
A new feature in ZyDesk allows (if configured) an Agent to select a Queues A-number before dialing out:

	Subscribed queues		
	Personal queue	0	
	Demo AC (35294886) 2(+1) Agents	0	
	Demo CC (88336641) 3 Agents	0	
	Demo Chat Cisco (ms) 1 Agent	0	
Calling as 336641 (Demo CC (88336641))	Demo Facebook (Zylin 🚽	0	
Reset Caller ID		_	

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

2.2.13 Caller Rated Queuing - release 6.0u2

Caller Rated Queuing allows moving callers to another queue based on their phone number.



The functionality can be enabled on a per queue basis based on the following settings:

- Never Functionality disabled
- If Available Only move call, if the target queue is open and monitored
- Always Always move the call, regardless of the status of the target queue

The Callers rating and Queue are retrieved from either:

- Web service lookup (real-time)
- Database lookup (real-time)
- File (.csv) lookup (real-time)
- Zylinc Directory lookup where it can be set from
 - o .csv import as new contacts or as additional information to existing contacts/users
 - Edited from Zylinc clients by end-user (e.g. a supervisor)



2.2.14 ID Lookup directly in file - release 6.0u2

In previous releases, ID lookup towards customer systems had to be configured to either look directly in a Database (Stored Procedure) or to use a Web-service lookup.

If the customer data was available in a system file (e.g. a .csv file) it had to be first imported into the Zylinc Directory.

In 6.0u2 it is now possible to do a direct lookup into the .csv file. The .csv file is cached by the system to maximize performance.

Configuration of .csv lookup is configured as part of the ID Lookup on the admin portal where also the datatype/format of the .csv file can be configured.

ID Lookup - External:						
Provider:	CSV File 🗸 🕑					
CSV File location:	\\zyshare01\dirsync\100Kusers.c:	Location User:	zylinc\zyadmin-svc	0	Location Password:	0
Mappings:	Field: Email-address v CSV Index:		Company : 4 DN : 1 Email-address : 28	^ 6		

2.2.15 Supervisor Listen-In, Whisper, Barge-In - release 6.0u2

Release 6.0u2 introduces supervisor functionality in Zylinc Service Center.

Supervisor functionality makes the following features available for users, part of the Supervisor Security group:

- Listen-In: Listen to another agents ongoing call
- Whisper: Talk to the agent without the other party hearing it
- Barge-In: Participate in an ongoing call

The above supervisor features becomes available when opening the Supervisor window - if available in the Service Center profile:

Zy	Supervisor						_ X
	Filter agents					All	~
	Name	Status		Talking Time	C	Call Info	
	Azita Test	/ Idle					
1	Daniel Laursen	Inactive					
	Peter Hansen	🗾 Idle					
						Listen	
						Listen	
	Agent			Call Info			
	(Internal I						
		Peter Hansen zylinc					
		zph@zylinc.com					
	Listen	Whisper	Barge In			Leave	
	Listen	Whisper	Barge In			Leave	

When opening the window the user is automatically set to Inactive to avoid incoming calls being distributed while the supervisor functionality is enabled.

The supervisor will be able to see information about ongoing calls for all currently logged in agents and is allowed to Listen-In on any of these calls.

When listening-in the supervisor can go into Whisper mode or Barge-In mode and can at any time fall back to Listen-In mode.

The agent being Listening-In on is not notified when the supervisor participates in the call.



2.2.16 CC/SC Call Reason Code categories - release 6.0u2

Release 6.0u2 introduces categories to the existing Call Reason codes functionality.

When configured with a category an Agent will be presented with the Reason Code Categories before the final Reason Code can be seleted.

Call Reason Code list:	Multiselect: 🗹 🚱 M	fin. one selection: 🗹 🔞	
	Category: 이	Reasons: 🔞	
	Sales	Lead;Follow-Up;Demo	Delete
	Support	Support;Test	Delete
	Other	Demo;Admin	Delete
	Add Category		

Both the category and the code is stored in the statistics and as such this feature can both be used for categorizing the Agents choice as well as it can be used for customers who needs both a Call Resolution and a Call Reason code.

2.2.17 Mail Editor improvements - release 6.0u2

A number of improvements to the mail editor used when answering requests from a mail queue have been made. These improvements include:

- Auto Signature with HTML support when replying, is added as both a generic and an agent overwrite setting
- Knowledge base format has been extended to include HTML
- Print option added to allow printing directly from mail editor
- Original message separated by more standard HTML formatting
- Support for fixed BCC
 - e.g. can be used to archive mail responses in CRM systems such as salesforce)

2.2.18 Transfer improvement for Hold, VM and CB - release 6.0u2

In Release 6.0u2 several Call transfer scenarios has been added or improved. This includes the following:

• Call On-Hold Transfer

It is now possible to directly transfer a call on hold without having to resume the call first

- Voicemail transfer for BroadWorks If a user has a BroadWorks integrated voicemail system the "Transfer to voicemail" option is now available when having an ongoing call and right clicking a user in the Gannt
- Consultant Transfer for Callbacks
 Now possible to make a Consultant transfer to another user after a Callback has been dialed

2.2.19 Contact info via SMS or email - release 6.0u2

Support for allowing a user in ZyDesk to send Contact Info via mail or SMS has been added to the solution. The functionality has been added directly into the Send Message component:

To* CC Subject* SELECT CONTACT TO SHARE Message SELECT INFO TO SHARE SELECT INFO TO SHARE SELECT INFO	Autotext	•
Share Cancel	Clear Cancel	

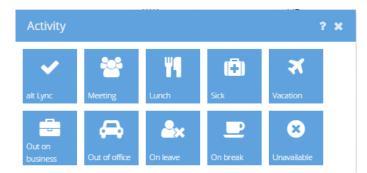


2.2.20 Zylinc Activity - release 6.0u2

Release 6.0u2 introduces the concept of Activity into Zylinc products.

Activity (also called Nordic Presence) allows users to set their current Activity (Lunch, Holliday, Travel etc.) in the Zylinc products via a simple interface. A user's Activity can be viewed by others in the company and, if configured, an automatic forwarding of the user's phone might take affect during the Activity.

In release 6.0u2 only Zylinc's new product **Web Directory** supports setting Activity, while ZyDesk supports showing them, but in future releases Zylinc's entire product portfolio will have full Activity integration.



Activities can be enabled and used together with Zylinc Absence or it can be used as an alternative. The table below shows the current differences between Zylinc Activity and Zylinc Absence:

	Absence	Activity
Description	Calendar Appointment with a special category that can be set in Zylinc clients.	Activity (Lunch, Sick) set in Zylinc systems
Calendar Sync	Yes. If user is synchronized to Exchange, Notes, Google	No
Start time	Date+Time Mandatory	Always from Now
End time	Date+Time Mandatory	Duration Optional
Templates	System Defined Absence Templates Possible to add/modify/remove	11 * Zylinc standard Activities Possible to modify name & hide some
Forwarding	Calendar based forwarded can be configured to react on template category.	Optional on each Activity Forward to number or Spoken Absence (dropdown)
Spoken Absence	Supported via forwarding	Supported directly on Activity
Enable/Disable	System level for all Clients	System level for all clients
Zylinc Release	Since 1.0	New in 6.0u2

Activities are defined on the Admin Portal and 10 Activities are defined by default. More can be created if required, and any of the 10 default activities can be disabled (not deleted).

Activity general settings:			
Name:	Meeting	0	
Duration:	End of the day	× ()	
Forwarding:	Own home	× 6	
lcon:	🖀 Meeting	v .0	
Busy-state:	Busy	v 0	
Enabled:	✔ 🚱		
All Languages Enabled:			
Translations:			
English	✓ Meeting		
Danish	▼ Møde		Delete
Add Language			

When configuring an Activity, the following forwarding options can be applied:

- User's Home number, Mobile number, Short Number etc....
- Alternative User's Home number, Mobile number, Short Number etc....
- A fixed number (e.g. the main number)
- Spoken Absence



2.2.21 Directory Management - release 6.0u2

Rules for what is available when editing a user is now controlled by settings on the Admin Portal on a new page called **Directory Management.** This page allows Administrators to define what a user can modify on themselves and what they can modify on the other users they have access to edit.

Fields a user may e	dit on himself:						
Personal Fields:	✓ Name	Surname	 Display name 	✓ Title	✓ Alias	✓ Initials	
Address/Location:	Country	✓ State	City	Postal code	Street address		
Organization:	Company	 Department 	✓ Office	SMTP address			
Contact numbers:	 Office phone number 	 Mobile phone number 	 Home phone number 	Fax phone number	Pager phone number	Short phone number	Skype for Business phone number
Misc.:	 Routing priority 	✓ Note	Keywords	 Alternative contact 	 Queue name 		
Fields a user with [Directory Management righ	ts may edit on others:					
Personal Fields:	✓ Name	Surname	 Display name 	✓ Title	✓ Alias	✓ Initials	
Address/Location:	Country	State	City	Postal code	Street address		
Organization:	Company	 Department 	✓ Office	✓ SMTP address			
Contact numbers:	 Office phone number 	 Mobile phone number 	 Home phone number 	 Fax phone number 	Pager phone number	Short phone number	Skype for Business phone number
Misc.:	 Routing priority 	✓ Note	Keywords	 Alternative contact 	 Queue name 		
							Save

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 using Routepoints in Multitenant installations. Using Zylinc media server is often a simpler 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	 x no. of Virtual Servers in an Application Pool Zylinc Windows Application Server with MT pack One Microsoft SQL-server cluster Windows Server On Master Portal server Windows Server
BroadWorks Integration Requirements	 XSI for Presence and Profile control SIP Trunk or SIP UA for media control 	 XSI for Presence and Advanced Media control BroadWorks routepoints platform license BroadWorks CC Agents FTP/SSH access for media upload
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 Routepoints the following must be available:

- CTI connection to a BroadWorks R20 or higher
- BroadWorks Routepoint Platform license available
- Each Agent/Endpoint must have the BroadWorks CC Premium service applied

2.3.2 BroadWorks Enterprise model

The BroadWorks system is 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, 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	v 🕜	User Priority Domino Directory	v 0	Mail Priority Exchange	× 🚱
	Emaily load coo		y bonnie birectory		y Excitatinge	

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 features 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	~			~
Department Mode	:				
				Selected Department/Trunk	
Department:		0		Development/estation	^
Selected SipTrunk:	cacofonix	~	(
					\sim
Company Mode:					
				Selected Department/Trunk	
Company:		0		Zylinc/estation	^
Selected SipTrunk:	cacofonix	~	÷.		
,					\checkmark

2.3.5 SIP Simple support for combined Fixed/Mobile setup - release 6.0u2

Line-state support via SIP Simple in previous releases would always be interpreted as Mobile linestate, i.e. the Mobile Icon in Zylinc products would always change accordingly.

In release 6.0u2 the SIP Simple configuration allows events on the interface to be interpreted as either Mobile and/or Deskphone events, and does even allow setups with events from both phones to be distinguished:

SIP Simple Subscription:				
Subscription Type:	Single Subscriptions	¥ 🕜	Timeout: 3600	
Group ID:	0405507013	0		
Userpart Mobile - Db Column:	Pager Number	v 😮	Prefix:	Suffix:
Userpart Office - Db Column:	Office Number	۷ 🕜	Prefix:	Suffix:
Userdomain:	zycallswitch02.zylinc.com	0		

2.3.6 SIP Auto-answer support - release 6.0u2

A number of Deskphones and even some Softphones support autoanswering a phone (lift handset functionality) via tags in the SIP Invite message.

In Release 6.0u2 Zylinc has added support for the most common interpretation of the standard by including a combination of one of the following tags in the invite message when the client Software orders "Pick-up" of a call:

- call-info method
- Alert-info method

Different variations of the above are used for different vendors - examples:

- 1. Call-Info: <sip:10.11.12.13>\;answer-after=0
- Snom (newer), Yealink & MitelCall-Info: answer-after=0
- Snom (older), Grandstream & Linksys
- 3. Alert-Info: Ring Answer *Polycom & Mitel*
- 4. Alert-Info: info=alert-autoanswer *Aastra*

It should be noted that the above examples are guidelines only, as even different firmware might impact the support. Zylinc does not maintain a compatibility list and as such can not guarantee that the SIP autoanswer functionality will work against a specific vendor or phone.

For the method to work, Agents must either work in Manual mode (where they always have to pick the call) or they must work in Automatic Mode and use Call Offer. For Agents in Automatic mode without Call Offer enabled the Autoanswer command can not be send.

The SIP Auto-answer method does not impact the existing autoanswer support for Cisco CTI Approved Phones, BroadSoft Advanced-CC Approved phones or Skype-for-Business Certified phones. These continue to work directly via Zylincs API integration.

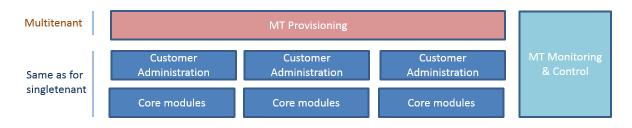


2.4 New products

2.4.1 Multitenant

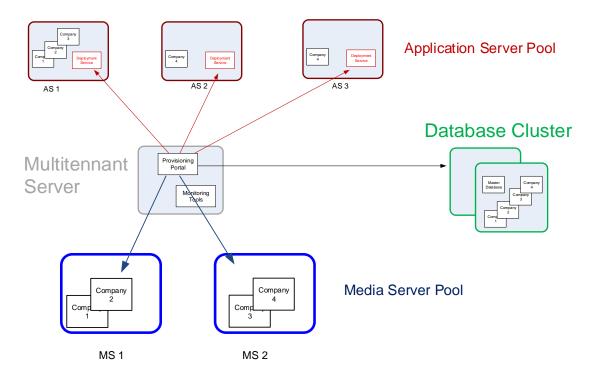
Release 6.0 includes support for multitenant configurations of the Zylinc solution.

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 an assigned Application Server as illustrated in the following figure:



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

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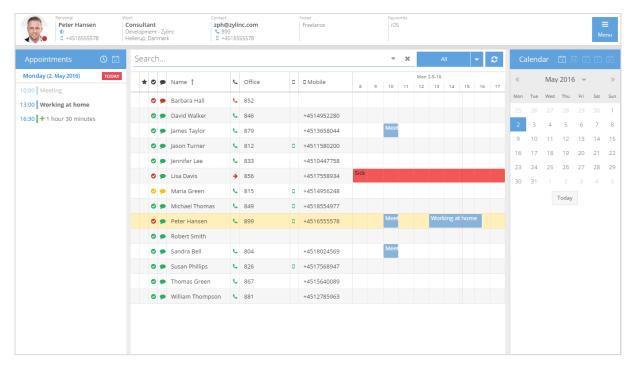
2.4.2 Web Operator

Release 6.0 officially introduces the new product Web Operator.

Web Operator is a browser version of Zylincs Operator desktop client ZyDesk running as a Windows Application.

The solution contains features for:

- 1. Quick overview of colleagues' availability.
- 2. Automatic calendar update with absence functionality.
- 3. Absence function with user customizable template 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
- 7. Huntgroup control for BroadWorks 6.0u2



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



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 for Skype-for-Business Zylinc now also 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 user's 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.

2.4.4 Web Directory - release 6.0u2

Release 6.0u2 introduces the new product WebDirectory.

Web Directory is a browser solution positioned as a scaled-down version of Zylinc's Web Operator and includes features such as:

- Company directory
- Phonebook administration
- Advanced search
- Phonebook export
- Activity set your activity
- Directory management edit users in the directory

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Search						👻 🗙 All groups 👻 🗲
Name † New_York	Email Home newyork@zylinc.com	Office	≰r Short	0 Mobile	Department	Notes
Peter Eyermann	pey@Zylinc.com					
Peter Hansen	zph@zylinc.com +4520157	798 +4533590613	613	+4530449205	Development	Freelance, kontaktes på mobilnummer
Peter Meyer Nielsen	pmn@Zylinc.com	621			Development	
Peter Test 1	tupmn1@zylinc.com					
Peter Test 2	tupmn2@zylinc.com					
Peters test bruger				+4561306192		
Poul Salling	psa@Zylinc.com	664	664		Development	test
Poul Test 1	Activity			×	Asiakastoimitukset	
Queue-E1 ZyMail	😁 30m : 🖻				Imagination Develo	
Queue-E2 ZyMail		Gone for	Out on		Imagination Develo	
Ragnar Ómarsson	Meeting Lunch 🖤 Sick	Vacation Today	Business	31619299		
Rasmus Room 1	Cut of Office On Leave Part of			31621005	Development: Helle	hest fest gæst \tkl 12:00 \tmast
		V	Forward to Mo	bile u		
No Appointments found!	You are Available! Click to	change 🔺		e not forwarded ot disturb disabled	^	You won't have time for sleeping, soldier, not with all the bed making you'll be doing. OK, this has gotta stop. I'm going to remind Fry of

Web Directory is deployed as a .war installation file on the Tomcat server. The web-directory also introduces a web-interface for modifying users in Zylinc Directory.

	Display name:	Title:		Email:	Lync number:	
	Felix Hansen			zylinc-fh@zylinc.com	n	
	Name:	Surname:		Office nr.:	Mobile nr.:	Short nr.:
ds	Felix	Hansen		+4533590777		777
	Office:	Department:	Company:	Home:	Pager:	Fax:
	kbh.hvoip.dk		Flumlinc			
	Country:	State:		Alt. contact:		
		State:		Alt. contact:		
				Notes:		
				Notes.		

In previous releases, users could only be modified from the ZyDesk Windows client. The Webinterface in release 6.0u2 is embedded in the new product **Web Directory**, and the existing **Web Operator** and follows the same security rules as ZyDesk.



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)	 BroadWorks Directory Sync 	 Exchange Sync WS
Queue Manager (former Switch Proxy)	 BroadWorks User Proxy 	Domino Sync
	(former BroadWorks Presence)	 Domino Server (absence)
Portals	 Broadworks Queue Handler (Beta in 6.0) 	CalDAV Sync (Google)
Admin Portal		
Statistics Portal (new GUI 6.0)	Cisco	Lookup
	 Cisco Directory Sync (new 6.0) 	ZyCore ID
Database	Cisco User Proxy (new 6.0)	,
Deployment Manager	(Replaces old Cisco Integration Modules)	Mobility/ Messaging
. , 0		Mail Queue Handler
Event Bus	Lync	• XMPP Queue Handler (new 6.0)
• ZyGo	Lync User Proxy	Messaging Portal (former SMS Portal)
,	Ivnc MSPI Manager	000

Client

- ZyDesk Framework
- Mobile Operator/ Agent
- Web Operator
- EventBoard

Diagnostic and Reporting

Service Manager

Authentication

Authentication Server (new 6.0)

- Lync MSPL Manager
- Lync Chat Queue handler

Presence (others)

- Mobile Presence Adapter
- SIP User Proxy (former SIP user Agent)
- Sametime Adapter
- XMPP User Proxy (former XMPP Presence)

Enterprise Directory

- Directory Server
- ZyDomino

- Portals
- WallboardDataServices
- Tunnelling Server

Advanced Forwarding

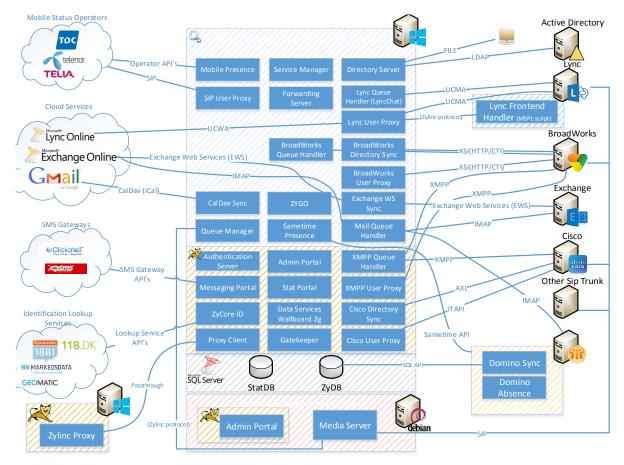
Forwarding Server

Mobile Backend

- 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 primarily 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 the 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 Ma	arch - 8 March (1 Da
Lill Export	KPI data for: Today This	Week This Mont	h This Year	Other 🔻					Total	Calls Avg Hand
🖕 Logs	Users		Incoming Answer	Calls Incoming Unanswere	d Outgoi	ing Tota	Total Tal	Avg. Ha	Handling First Response	g Quality Transfer Failed
🛓 Personal	Bo Jensen		0		0	0 0	o -	-	-	-
	Camilla Lehn		0		0	0	о -			
🔅 Settings	Fredrik Chronqvist		0		0	0	D -	-	-	-
	Hans Ulrik Madsen		0		0	0) -	-		
	Helen Patterson		0		0	0) -	-		
	Helle Frederiksen		66		4	39 10	9 00:32:51	00:00:19	64%	2.0
	Helle Test 1		11		2	2 1	5 00:02:47	00:01:09	100%	
	Henning Nielsen		0		0	0	0 -	-	-	
	Ina Pontoppidan		0		0	0 0	D -	-	-	
	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	1	0	41 13	2 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 authentications (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 tasks between tenants are handled.

					Logout tp@zy	Inc.com Multitenant	sion 1.1.35			
TENANTS	SERVERS	USERS	SERVICES	ADMINISTRATION						
ervers										
Application Server								Logout	zylincadmin N	Aultitenant Port
Name										
AS1 (Application Server #	¥1)		TENANTS	SERVERS	USERS S	SERVICES ADMI	INISTRATION			
			Templates - Cor	figuration						Upload a template
Multitenant Server			Administrat	on Portal Setup						
€ame			Not selectable							
fasterApplicationServer	(Master Application Server)		Name	-	Display name All Enabled	٠			Default	
			All Enabled Broad/Verks only		All Enabled BroadWorks only					
			Test Administratio	Portal Setup	Test Administration Portal Scrup					
GQL Server										
€ame										
S1 (SQL Server #1)				m Configuration						
			Not selectable		Display name	 ZyDB version 		Feature sets	Default	
			Configuration Terr		Configuration Template	18.15.0.0		Broad/Norks, Clisco, Rolas, Calendars, Absence Templates, Appointment Categories, Caller Lookup		
										Save



3.4.9 Activity Server - release 6.0u2

The new Activity feature requires installation of the new module "Activity Server". The Activity server is a Windows Service controlling the feature and communicating with clients. If the Activity feature is not used, this module does not need to be installed.

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 have a new default port.

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

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 location 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.



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.

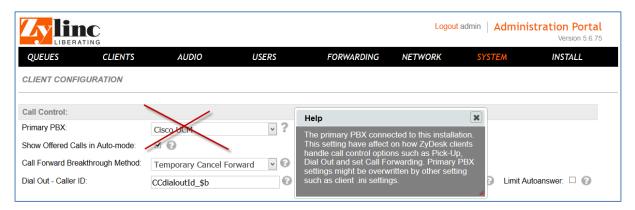
In the 6.0 release, information in the Active Call window is customizable on the profile itself – both in terms of what is shown and on what line. Furthermore, a number of new information fields such as priority and caller address are now possible to show.

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)					SETTINGS	MEMBERSHIPS	PRIVILEGES QUEUE
User (Operator):									
Device:	BW Deskphone	· 0	ID:	zylincuser04@zylinc.hvoip.dk	0	Number:	+4533590614	Θ	Default: 🗹
Agent - Incoming Calls:									
Device:	BW Deskphone	× 🕜	Default Type:	Zylinc Media Server	· 🕜	Default: 🗆			
Media Server Number:	Shortnumber (614)	~	Extension:	614	Ø	SIP Trunk:	cacofonix	· 6	

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

For installations with only one Queue Handler (most installations) fewer 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 Privileges

New Privileges have 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 privileges needs to be added to existing profiles if required – except for the "Queue – Administrate Member Queues" Privilege (see next chapter).

The following existing privileges have 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
- Listen-In, Barge-In, Whisper on other Agent in Service Center release 6.0u2

In 6.0u2 two new Security Group for Directory Management has been introduced: - release 6.0u2

- Directory Management
- Directory Management (Custom)

These Security rules controls who can edit normal users and Custom users (Contacts) and replaces the previous "User admin" ZyDesk Settings checkboxes:

Settings		_ ×
 Administration Interface Audio Knowledge Base Operator 	User admin Allow edit of System users:	
 Bernesence Program Search Shortcuts Startup Switch Time User 	Allow edit of Custom Users:	E
Details <u>Extended Directory</u> Name Display Format	City Company Country Department	

Note: When upgrading from a previous release no Security Rules are created by default for Directory Management. The new settings for what is allowed to be edited (see chapter "Directory Management") however means that nothing can be changed until these are set.

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 effects 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 portals has the same configuration.

4.8.2 Queue visibility

In previous versions, 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 privileges 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 previous 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.

4.9.2 Cisco Multi-Provider support and filtering - release 6.0u2

It is now configure several CUCM providers. The Cisco User Proxy module will first assign a user to a provider when the terminal registers on that CUCM. If a terminal should unregistered or go out of service on the CUCM, the user will be unassigned from the provider. If the terminal should register on another CUCM. The user will then automatically change to the new provider.

The Cisco Directory Server has a user black list and a department white list now. This means, that if there is any department in the white list it will only sync those and you can blacklist single users in that white list.

4.9.3 Changed URL's to Cisco user proxy in the Admin Portal

Two URL's in the Admin Portal must be changed to a new format (6.0u2)

If upgrading from 6.0 to 6.0u2 or newer:

- There are now 2 different URL's to Cisco User Proxy in the Admin Portal, and they should be entered in two different formats. (Cisco User Proxy, ZyGo and ZyDesk must be restarted to understand the changes)
- Change Admin Portal / Network / Cisco Interworking, User Proxy Address: from the format http://x.x.x.x8080/CiscoUserProxy/ to the format http://x.x.x.x8080/ (remove the CiscoUserProxy part of the URL)
- Insert the Cisco User Proxy URL into Admin Portal / System / Interface Configuration, Cisco User Proxy: The format should be http://x.x.x.x8080/CiscoUserProxy/

The Cisco User Proxy and Cisco Directory Sync modules now support multiple providers. Add Cisco Provider Config and enter the provider information into this new provider.

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See http://infowiki.zylinc.com/techwiki/index.php/Migrate_to_new_Cisco_modules

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\Pu	blic\StatExport 🕜 User:	Password:	••
Keep old:	✓ (2)			
User Report:	✔ 🕜	Name: UserStatistics	Ø	
Queue Report:	✓ (2)	Name: QueueStatistics	Ø	
User State Report:	✔ 🕜	Name: UserAggregatedState	0	



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 multiple queue handlers has been added. If an installation only has one type no difference will be noted on the portal.

4.12 Zylinc Proxy settings - release 6.0u2

In previous versions the Zylinc Proxy settings were configured in local .properties files in the *shared* library where the services were deployed. This made changing configuration cumbersome as the systems administrator would need to edit these files when changing ports and moving services.

In 6.0u2 this configuration has largely been moved to the administration portal. As this is moved from local files to a central database, the settings are *not* migrated, and thus need to be configured as a part of the upgrade.

The Zylinc Proxy, located in the DMZ now only needs to have a single port configured: The internal port that it listens for connections on. The Zylinc Proxy Client is now locally configured similarly to other Zylinc modules with a database connection.

Each Zylinc Proxy Client can be configured on the admin portal in Network/Zylinc Proxy. The name should correspond to the deployed name of the Zylinc Proxy Client. The service address and port make up the URI of the LAN service that needs proxying. The WAN port is the port that the Proxy Client should listen for new connections on. Finally, the host address and port is similar to all Proxy Clients, and make up the URI to the Zylinc Proxy that the Zylinc Proxy Clients should connect to. So the host address should be the address of the Zylinc Proxy as seen from the LAN, and the port should be the port the Zylinc Proxy was configured with in the previous paragraph.

For more information, see:

http://infowiki.zylinc.com/techwiki/index.php/Updated Zylinc Proxy and Zylinc Proxy Client module s_in_release_6.0u2

4.13 Zylinc Media server deployment

The Deployment Manager is now capable of deploying the Zylinc Media server '.tgz' files. This easens up the entire installatiion/update process, as all Zylinc components now can be handled using the Deployment Manager.

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

5.1 Platform Support

	Zylinc Server	Zylinc PC Clients	Zylinc ZyMobile
Operating System	Windows 2008R2	Windows 7 / .NET4	Android 4.0 to 7.1
	Windows 2012R2	Windows 8	IOS 8.0 to 10.1.1
		Windows 8.1	
		Windows 10*	

Known font scalability issues

	VMware	Microsoft	Citrix	Oracle
Server Virtualization	vSphere 4.x	HyperV 2008R2		VirtualBox 4.x
	vSphere 5.x	HyperV 2012R2		
Client Virtualization			XenDesktop*	
			4.x, 5.x, 6.x, 6.5	

* Zylinc Softphone voice quality cannot be guaranteed. Trial on end-users Citrix system must always be carried out first

	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 11	Firefox 46 to 49	Google Chrome 50 to 54



5.2 UC & Phone Support

	Microsoft	BroadSoft	Cisco	IBM	Other
IM Presence integration	Lync 2010 Lync 2013 SfB On-Premise SfB Office 365	BW R17-R21	CUP 8.6.x CUP 9.1	Sametime 8.5.x	
Line State	Lync 2013 SfB On-Premise (Supported as Busy- InCall Activity)	BW R17-R21	CUCM 7.x-11.x	SUT 8.5	Most systems supporting SIP Simple as described in R6665/RFC3862
Forwarding information and Control	Lync 2013 SfB On-Premise	BW R17-R21	CUCM 7.x-11.x		
Deskphone Call Control	Lync 2013 SfB On-Premise (Only USB SfB client connected devices)	BW R17-R21 (Devices listed in BroadSofts Advanced Call Control list)	CUCM 7.x-11.x		Autoanswer supported for most devices implementing RFC3265, RFC5373 or RFC7462 autoanswer part
Chat Server integration (required for Chat Queue)	Lync 2013 SfB On-Premise	BW R21	CUP 8.6.x CUP 9.1		
UC Client integration	Lync 2013 SfB On-Premise	BTBC 21.x BTBC 22.x	Jabber 9.0.x Jabber 10.0.x Jabber 11.6.x		

5.3 Calendar Support

	Microsoft	IBM	Google
Calendar integration	Exchange 2007	Domino 6.x	Enterprise Calendar
	Exchange 2010	Domino 7.x	
	Exchange 2013	Domino 8.x	
	Exchange 2016	Domino 9.x	
	Exchange Online (o365)		

5.4 Services support

	TDC DK/NO/SE	Telia DK/FI	Telenor DK	Telenor NO	Generic
Mobile Presence	MobilFlex Connect	Brobiz/Mobiz Telia Sonera FI	Statusplan v2	Mobilt Bedriftsnett	SIP Simple BroadSoft ME
	Scale Mobil				

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

5.5 Microsoft Lifecycle impact on Zylinc support

Zylinc support for Microsoft products follows Microsofts Product Lifecycle as described here: <u>https://support.microsoft.com/da-dk/gp/lifeselect</u>

Typically, when a Microsoft product has passed "Mainstream Support End Date" it should no longer be expected to be supported by Zylinc solutions (although exceptions exists). This also includes products Zylinc does not directly integrate such as Microsoft Office Excel etc.

For some Microsoft products such as Internet Explorer the End of Support date differs for different Operating Systems:

https://support.microsoft.com/en-us/help/17454/lifecycle-support-policy-faq-internet-explorer

In these case Zylinc support should no longer be expected when none of the supported Operating Systems are listed in the Zylinc PC Client section.



6 Hardware & Software Requirements

6.1 Workstation

ZyDesk 6.x minimum requirements:

- Windows 7, 8, 8.1 & 10
- 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.