VisualGroups 1.10

Documentation for Administrators and Users

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Legal information

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Contents

1 Installing VisualGroups

This chapter describes the server sided installation of VisualGroups from 1.1 on. The use of the client is described in 3 *Using SwyxIt! with VisualGroups*, page 29.

VisualGroups offers the possibility of visually managing call queues in SwyxIt!. Incoming calls are automatically queued and forwarded to available users. Missed calls can be traced back. Additionally, VisualGroups Enhanced offers a statistic function.

A queue is a SwyxWare user including a Call Routing Script and an assigned number. The users' SwyxIt! or NetPhone clients receive and display the queue calls using VisualGroups skins.

According to the "longest inactive" principle, the queue calls are automatically forwarded to the users' internal number. The user determined by the system then has a defined time to answer the call before the caller is being forwarded to the next available user. After a call the user has a wrap up time defined by the administrator in which no calls can be forwarded from the system to the user.

1.1 System requirements

The same system requirements apply for the server- and client-side VisualGroups installation as for SwyxIt! or Netphone Client and SwyxWare or Netphone. See chapter "System Requirements" in the SwyxWare or Netphone documentation.

Starting with VisualGroups 1.5.0.0 you need SwyxWare 11.38 or higher.

1.2 Installing

You must install VisualGroups on the same computer you use for SwyxWare.

For the installation SwyxWare system administrator rights are required.

The use of a remote SQL server is not supported by the VisualGroups installation wizard. For this use the unattended installation method, see *Remote SQL Server Support*, page 9.

For operating VisualGroups Microsoft IIS is required. If Microsoft IIS is not installed, it will be installed via the VisualGroups installation wizard.

The queue users, included in your license, are installed automatically via installation wizard. You can create additional queues via web portal after you have purchased additional licenses. After the configuration of queues you must assign a number to each user created for the queues. See chapter "Numbers and Number Mappings" in the SwyxWare documentation.

You must assign one of the VisualGroups skins to the users' SwyxIt! or Netphone clients so they can receive and display queue calls.

For information on licensing see the SwyxWare documentation, chapter "Licensing, Licensing via licence key, Options and option packs, Swyx VisualGroups".

Check if your license is valid before configuring VisualGroups. Hints of invalid licensing appear on the web portal start page.

How to install VisualGroups

1 Define the following firewall settings on your server:

Log	Port	TCP/UDP	Direction
HTTP	80	TCP	Inbound + Outbound
HTTPS	443	TCP	Inbound + Outbound

2 Download the "SwyxPLUSVisualGroupsInstaller.exe" from the Swyx website and start the installation.

3 From the dropdown list select the required language.
   ✓ The VisualGroups installation wizard start page appears.

4 Click on **Next** to start the installation.

5 Activate the checkbox to accept the license agreement.

6 Click on **Next**.
   ✓ Your system is being checked.

7 Click on **Next**.

8 Click on **Browse** and select a memory location, if applicable.

> ⚠ If you remove the IIS website on which VisualGroups is active or the virtual directory for VisualGroups you cannot use VisualGroups anymore and have to reinstall the application.

   ✓ Your system is being searched for a SwyxWare and a SQL database installation.
   ✓ The name of your SQL server instance appears.

9 Depending on your configuration you can select **Windows authentication** or **SQL server authentication**.

> ℹ The usage of Authlite Two Factor solutions or similar products might result in an installation error when using Windows Authentication for the SQL connection. It is therefore recommended that you use SQL authentication.

10 Click on **Next**.
   ✓ An overview of your IIS installation settings appears.

11 Click on **Next**.
   ✓ VisualGroups is being installed.

> ⚠ Your system may be restarted automatically during the installation, depending on which Windows components are already installed. The restart can cause an interruption of the telephony functions on your server. The installation assistant will be restarted automatically after the interruption. The installation will continue with the step where the interruption occurred.

12 Click on the link to configure VisualGroups via Web Portal.
   ✓ You are forwarded to the configuration wizard and can configure VisualGroups initially, see 2.1 *Configuring initially*, page 12.

> ⚠ Log in to the Visualgroups web portal with a system administrator account to allow VisualGroups to update the queues and complete the installation.

> ℹ You can use your user name or UPN (Username@company.com) to log in to the web portal.

> ℹ If you have a large number of VisualGroups users (about 400 or more), it is recommended to adjust the client sided update time.
> Enter the desired value in milliseconds in the registry key "Computer\HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Swyx\VisualGroups\userinterval".
> For example, enter "5000" to set the update time to 5 seconds. The default value is "3000".

1.2.1   Refreshing

You can update VisualGroups by executing the installation file. Your current version will be automatically identified and the update starts.

> ℹ You can run the installer again at any time. If the same VisualGroups version is already installed on your system, all found configuration data will be preserved (repair installation).

> ℹ The update will also affect your VisualGroups database, therefore you need to create a backup in advance.

1.2.2   Backing up and restoring

You can backup and restore your VisualGroups environment with current data. The VisualGroups instance is stored on your SwyxWare database.

How to create a backup of the VisualGroups database

1 Stop the VisualGroups website in the Microsoft IIS-Manager.

2 Create a backup of the VisualGroups database. By default the name of the database is **VisualGroups**.

3 Start the VisualGroups website in the Microsoft IIS-Manager.
   ✓ The current database of your VisualGroups directory is backed up.

How to restore a VisualGroups environment

1 Stop the VisualGroups website in the Microsoft IIS-Manager.

2 Stop the "SwyxPLUS VisualGroups Reporting and Maintenance" service in the Windows Task Manager.

3 Restore the VisualGroups database backup you have created before (e.g. using Microsoft SQL Server Management Studio).

4 Start the VisualGroups website in the Microsoft IIS-Manager.

5 Start the "SwyxPLUS VisualGroups Reporting and Maintenance" service in the Windows Task Manager.
   ✓ Your VisualGroups environment is restored to the creation date of the backup.

1.2.3   Changing VisualGroups storage directories

By default VisualGroups files are stored in the following directories which you can change as follows, if applicable:

File	Storage directory	Changing option
Installation files	• For SwyxIt!, VisualGroups up to version 1.1.2.0: C:\Program Files (x86)\Swyx\SwyxPLUSVisual-Groups • For SwyxIt!, Visualgroups new installation version 1.2.0.0 or higher: C:\Program Files (x86)\Swyx\SwyxVisualGroups • For Netphone, VisualGroups up to version 1.1.2.0: C:\Program Files (x86)\T-Com\SwyxPLUSVisual-Groups • For Netphone, VisualGroups new installation version 1.2.0.0 or higher: C:\Program Files (x86)\T-Com\SwyxVisualGroups	During installation
Log file (trace files)	For SwyxIt!: C:\Program-Data\Swyx\Traces Or for Netphone: C:\Program-Data\T-Com\Traces	Via registry key, see *Storage directory*, page 8.
PDF files with reports (Reports are being sent via email)	For SwyxIt!: C:\Windows\Service-Profiles\LocalSer-vice\AppData\Roaming\Swyx\VisualGroups\reporting\ Or for Netphone: C:\Windows\ServiceProfiles\Local-Service\AppData\Roaming\T-Com\VisualGroups\reporting\	Changing not possible
IIS log files	%System-Drive%\inetpub\logs\LogFiles	In IIS in the logging menu you can adjust the settings.

1.2.4   Changing the trace level for VisualGroups files

You can define the storage directory and the trace level for each Visual-Groups component separately via Windows registry key:

- 1: Set by default, only serious errors
- 4: Significantly more information, useful for support purposes, e.g. the entire installation process is logged

> ℹ The Windows service account requires read and write rights for the selected storage directory. You may have to adjust the rights via the security tab in the Windows folder settings.

There are the following components available for the <component name> placeholder:

Component name	Function
admin	Logging the web portal activity
ecr	Logging ECR activities
installer	Logging the installation activities
reporting	Reporting creation and sending of the logs
user	Logging the user related data on the server side

> ℹ If there is no registry key you can create it yourself. Otherwise, the trace files are stored in the default directory.

Change	Registry key and value
Storage directory	Report name: Log file For SwyxIt!: HKLM\Software\WOW6432Node\Swyx\Visual-Groups\<Komponentenname>\CurrentVersion\Tracing Or for Netphone: HKLM\Software\WOW6432Node\T-Com\VisualGroups\<name of the component>\Current-Version\Tracing Value: <Storage directory> and <File name> of the log file (must have the ending .log) Type: REG_SZ
Trace level	For SwyxIt!: HKLM\Software\WOW6432Node\Swyx\Visual-Groups\<Komponentenname>\CurrentVersion\Tracing Or for Netphone: HKLM\Software\WOW6432Node\T-Com\VisualGroups\<name of the component>\Current-Version\Tracing Name: <component name> (s. table above) Value: „1" or „4" Type: REG_DWORD

1.2.5   Unattended Installation

You can also install Swyx VisualGroups in the background without user intervention. You can run the installer from the command line. To do this, you need an XML file that contains all preconfigured entries for the installation. The XML file should contain the following parameters:

```
<?xml version="1.0" encoding="utf-8"?>

<c:VisualGroupsConfiguration xmlns:c="http://
www.lanphone.de/schemas/2008/VisualGroupsConfiguration"
mode="automatic">

<c:GlobalParameter>

<c:Parameter Name="AcceptSwyxEULA">true</c:Parameter>
<c:Parameter Name="VGInstallationPath">C:\Program Files
(x86)\Swyx\VisualGroups</c:Parameter>
```

```
<c:Parameter
Name="SQLServerInstance">MACHINENAME\SQLEXPRESS</
c:Parameter>
<c:Parameter Name="SQLAdminLoginMode">SQL</c:Parameter>
<c:Parameter Name="SQLAdminLoginUser">Admin</c:Parameter>
<c:Parameter
Name="SQLAdminLoginPassword"><![CDATA[Passw0rd$%³€]]></
c:Parameter>
<c:Parameter Name="SQLVGLoginAutoCreate">true</
c:Parameter>
<c:Parameter Name="SQLVGLoginUser">SA</c:Parameter>
<c:Parameter Name="SQLVGLoginPassword">Passw0rd$%³€</
c:Parameter>
<c:Parameter Name="SQLVGDatabaseAutoCreate">true</
c:Parameter>
<c:Parameter Name="SQLVGDatabaseName">VG-DATABASE-01</
c:Parameter>

</c:GlobalParameter>

</c:VisualGroupsConfiguration>
```

> ℹ The parameter <c:Parameter Name="SQLServerCheck">true</c:Parameter> checks if the provided SQL information is valid (hostname reachable, username and password correct, sufficient permissions) before installing VisualGroups. If you set this parameter to false (recommended for debugging purposes only), this check will not be performed and VisualGroups will be installed without a valid SQL configuration.

To install VisualGroups unattended

1 Create an XML file with the parameters mentioned above.
A sample XML file is included in the VisualGroups download.

2 Run the installer in unattended mode by typing the following command:

```
"C:\path_to_installer\SwyxPLUSVisualGroupsInstaller.ex
e" -c C:\path_to_xml\unattendedVG.xml
```

✓ The installation takes place in the background.

3 If necessary, the computer restarts automatically. Then enter your login data to continue the installation.

> ℹ No message about a completed installation will be displayed. You can determine a successful installation by verifying that the VisualGroups Reporting Service is running as a service on the server and that the VisualGroups connection is set up and running in Microsoft IIS.

Remote SQL Server Support

Use 'remoteservername\SQLinstance' and enter the SQLAdminLoginUser and a password. This allows you to create or use an SQL logon account for VisualGroups instead of the (IIS) Application Pool user. Use the following parameters for the configuration:

Parameter	Description
SQLVGLoginAutoCreate	Set the value to 'true' to generate a new SQL logon with the credentials given below. Set the value to 'false' if you have already configured an SQL logon to the SQL server and want to use it.
SQLVGLoginUser	Specify the user to log in via SQL.
SQLVGLoginPassword	Set the password corresponding to the user to log in via SQL.

1.2.6 Obtaining VisualGroups via SwyxON

From SwyxON 2.10 on and VisualGroups 1.5.6.0 on you can also install VisualGroups via SwyxON.

For information on provisioning and installation via SwyxON see the SwyxON documentation for Administrators help.swyx.com/docs/manuals/english/SwyxON.pdf (keyword "Solution AddOns").

Log in to the web portal with your UPN (Username@company.com) and the corresponding password.

For further configuration of VisualGroups via SwyxON see *Access Web Portal for VisualGroups via SwyxON*, page 13.

1.3 Using VisualGroups together with SwyxWare groups

The assignment of users to queues or groups is independent of each other.

If users are assigned to VisualGroups queues (following **queues**) and SwyxWare groups (following **groups**) at the same time, interactions can occur.

If call signalling between group members or via configured relationships is configured for at least one of the groups, this affects all users as they can now receive call signalling. Calls to a member of the group are then signalled to all members via a Windows message window. A user in the group can pick up these calls.

If a user accepts a call signaled in this way, note the following effects:

Case A: A VisualGroups user picks up a call to his group

● The user cannot receive a queue call because he is already on the phone. This means that the user cannot be reached by the queue.

● This results in fewer calls appearing in the user's VisualGroups call statistics. See also 2.2.11 *Create, edit and request regular reports*, page 23.

● The postprocessing times defined for the queues do not apply to direct calls.

Case B: A user of a group accepts calls to a queue

● The call is considered Answered in the VisualGroups call statistics and in the optional queue report.

● The call is considered Missed in the personal VisualGroups statistics of the originally called VisualGroups user and in the optional report with user specific evaluation.

● In the optional report, the call acceptance by the accepting user of the group is displayed. See also *User information in report*, page 24.

ℹ SwyxWare recognizes one line concept per user. Different phone numbers can be assigned to the lines and specific settings can be made for each user's line. There is no line concept for queues. The call is delivered to a user, not to a line or an assigned phone number of this user. Therefore, no phone number is stored in the "Call Detail Records" of a queue call delivered in this way.

ℹ The wrap-up time set for a user in SwyxWare is independent of the wrap-up time set for the queue in VisualGroups. See *This is how you create and edit a queue*, page 14.

● The SwyxWare wrap-up time blocks the user's **line** after hanging up for the specified time for further call delivery on this line.

● The VisualGroups wrap-up time locks the user after hanging up for the assignment of queue calls for the specified time.

For further information on SwyxWare groups, see the groups chapter in the SwyxWare or SwyxIt! documentary.

1.4 Uninstalling

You can completely uninstall VisualGroups.

To uninstall VisualGroups

1 Uninstall „SwyxPLUS VisualGroups Reporting and Maintenance".

2 Uninstall "SwyxPLUS VisualGroups".
   ✓ VisualGroups is uninstalled. All calls to a VisualGroups queue are forwarded to the defined number, if applicable.

ℹ To remove all VisualGroups files from your system, you have to manually delete the VisualGroups database from your SQL server, the VisualGroups queue user in the SwyxWare Administration and the directory of the PDF reports. Additionally, you have to delete the IIS log files of the VisualGroups web instance, if applicable, see *Changing VisualGroups storage directories*, page 7.

To uninstall VisualGroups unattended

Alternatively, you can uninstall VisualGroups from the command line. See *Unattended Installation*, page 8.

Use the following parameter to uninstall:

```
<c:Parameter Name="SQLVGLoginAutoCreate">true</
c:Parameter>
```

If the parameter is set to "true", all other parameters are ignored (including AcceptEULA) and the uninstallation is carried out. The database remains intact.

To remove all VisualGroups files from your system, you have to manually delete the VisualGroups database from your SQL server, the VisualGroups queue user in the SwyxWare Administration and the directory of the PDF reports. Additionally, you have to delete the IIS log files of the VisualGroups web instance, if applicable, see *Changing VisualGroups storage directories*, page 7.

The uninstallation log is written to the VisualGroups Installer Trace in the general Trace folder for Swyx.

2 Configuring VisualGroups

This chapter describes the server sided configuration of VisualGroups. The use of the client is described in 3 **Using SwyxIt! with VisualGroups**, page 29.

2.1 Configuring initially

When the installation is completed, you can use the configuration wizard to configure VisualGroups initially.

> **i** For the initial configuration SwyxWare system administrator rights are required.

> **i** After 10 minutes of inactivity you will be logged off automatically of the web portal due to safety reasons.

How to configure VisualGroups initially

1 Open the Web Portal via the link in the installation wizard or in a web browser, *Further configuring*, page 13.

> **✓** You can also open the web portal via the desktop shortcut that has been created during the installation.

   ✓ The VisualGroups configuration wizard login page appears.

2 Log in with your user account. The user account must have SwyxWare administration right.

3 Click on **Next** to start the initial configuration.

> **⚠** If you cancel the initial configuration and start the configuration wizard at a later stage in an existing installation, all settings will be reset.

   ✓ Your VisualGroups lincenses are being checked.
   ✓ An overview of your VisualGroups licenses appears:
- License: Your VisualGroups lincense
- Number of queues: Current number of your licensed queues

4 Click on **Next**.

5 Enter names for the queues. The name appears in the users' SwyxIt! or netphone clients and in the VisualGroups reports.

6 Assign skins and users to your queues:
- Queue: From the dropdown list select the required queue.
- Skin: From the dropdown list select the VisualGroups skin you want to assign to the user.
- Available users: From the dropdown list select the group from which you want to assign users to the queue.
- User: Activate the checkbox in the line of the user you want to add or activate the checkbox in the **User** line to add all users in the list.
  Click on the "Arrow" symbol to assign the selected users to the queue.
  You can also assign users via drag and drop.

> **✓** You can enter a name into the search bar to search for a user.

7 Click on **Next**.

8 Define the reporting settings:
- Interval: Activate the checkbox of the time interval in which you want to receive your usage reports.
- Day of Week: Activate the checkbox of the day of week on which you want to receive your usage reports.
- Language: From the dropdown list select the language in which you want to receive your usage reports.
- Reporting time: Enter the beginning and the end of the time span in which the usage reports shall be created (e.g. your office hours).
- Recipient: Enter the email address to which your usage reports shall be sent.

9 Click on **Next**.

10 Validate your SMTP settings and enter your password for the authentification of SwyxServer at the SMTP server.

11 Click on **Next**.
- ✓ The web portal start page appears.

12 Click on **Finish** to finish the initial configuration.
- ✓ The initial configuration is completed. You can use the web portal for further configurations.

ⓘ After the initial configuration is completed, every SwyxWare administrator with a corresponding administration profile can use the web portal to configure VisualGroups, see *Further configuring*, page 13.

2.2 Further configuring

After the initial configuration of VisualGroups is completed, you can use the web portal for further configurations.

1 Enter the following address in your web browser:
- IIS as a local service:
  http://localhost/visualgroups/adminvg.aspx
- IIS as a separated service:
  http://<computer name/IP address>/visualgroups/adminvg.aspx

⚠ Your licenses are being checked once a day and with every login to the web portal. If you do not have sufficient licenses for your queues, the queues which have been created last are being deactivated first (Last-In-First-Out-Principle).

2 Log in with your SwyxWare user account.
- ✓ You are now logged into the web portal and can define settings there.

ⓘ You need a user account with SwyxWare administrator rights in order to be able to make all further configurations. An account with SwyxWare user rights has limited access to the SwyxWare installation, with this access, e. g. queues cannot be created or renamed.

Access Web Portal for VisualGroups via SwyxON

If you operate VisualGroups via SwyxON, you can access the web portal via the following options:

1. In VPN mode:
- via http://<Server-IP>/visualgroups/adminvg.aspx

2. In Remote Connector mode:
- via http://127.0.0.1:9980/visualgroups/adminvg.aspx
- SwyxIt! runs in parallel and is logged on to the SwyxON Tenant via Remote Connector or
- Admin Remote Connector is successful

Log in with your full UPN. For example, for the user "administrator" and the tenant or domain "company.com", use the login "administrator@company.com".

ⓘ To log in to the web portal, you need UC administrator rights or higher.

2.2.1 Creating, editing and deleting queues

When the initial configuration is completed, you can create additional queues via web portal and edit existing queues.

⚠ New licenses are being activated as soon as an administrator logs in to the web portal.

ⓘ SwyxWare administration rights are required to create queues.

ⓘ The separate creation of SwyxWare groups is not required for the use of VisualGroups.

This is how you create and edit a queue

1 In the menu select **Administration | Queues**.
  ✓ The list of your queues appears with the following information:
  ● Wrap Up Time: Time span after a call in which a user does not receive a new call.
  ● Maximum waiting time of callers after which they are forwarded to another number.
  ● Number of assigned users.

2 Click on **Add** or activate the checkbox in the line of an existing queue and click on **Edit**.

3 You can define the following functions:

Name	Description
Queue name	Enter a name for the queue. The name appears in the users' SwyxIt! or NetPhone clients and in the VisualGroups reports. *Note:* You can also rename queues in the web portal.
Language	From the dropdown list, select the language for the waiting and position announcements that callers in the queue are to hear.
Wrap-up time for users	Enter the rework time after a call in seconds in which a user does not receive a new call. Select **Infinite** from the drop-down list to set the wrap-up time mode to **Visible, automatic infinite** for all users in the queue. See *Wrap-up time*, page 21.
Ringing time	Specify the ring duration (5 to 180 seconds) for a call delivery attempt to a few Visual-Groups user in this group. If a user does not answer the call during this period, the call is put back into the queue.

Name	Description
Music on hold	Select an Audio file from the dropdown list. The audio file is used for waiting callers in the queue. You can edit the selectable audio files in the SwyxWare administration. *Note: You can configure custom music on hold by uploading an audio file to the global SwyxWare files directory and marking it as music on hold. The file can be selected when creating or editing a queue in the web portal.*
Allow users to edit their queue preferences	Activate the checkmark if you want that users can also define their criteria for automatic call delivery on their own. See also 3.10 *Defining criteria for automatic call delivery*, page 35.
Call strategy	Select a call strategy from the dropdown list. For detailed information on all strategies, see *Call Strategies*, page 16. If you have selected the strategy **Skill based**, assign the skills below via drag-and-drop or by selecting the corresponding checkbox and clicking on the corresponding arrow key.
Waiting time	If applicable set the waiting time after which callers will be forwarded to another number than the queue number when no user has taken the call.
Connect caller to	If required, enter a phone number to which callers should be forwarded if the specified waiting time is exceeded. You can also specify a phone number to which callers are forwarded if no users are logged in the queue.

Name	Description
Forwarding according to number of waiting callers	In the first input field enter the maximum number of waiting callers before further incoming calls are forwarded to another call number. Enter the corresponding phone number in the second input field. Leave both input fields blank to deactivate the function.
Last agent routing	Select a last agent routing method from the dropdown list and specify the period in seconds in which a returning caller will be delivered to the user who previously processed him. See *Last agent routing*, page 19.
Delivery to users with the "away" status	In the drop-down list, select **Yes** if queued calls should also be distributed to users who have their Swyx Presence status set to "Away". Select **No** (default) if you do not want users to receive queued calls when their status is set to "Away".
Automatically remove agents from call distribution on missed calls	If you activate this function, a user in the queue is automatically set to **Call Dispatch - Not active** after he or she has not answered a call. Calls in the queue are then no longer delivered to this user until he or she manually sets his or her **Call Dispatch Status** in the client manually to **Active** again, see 3.10.3 *Defining the call dispatch*, page 36. *Attention: This function can result in all users being removed from the distribution if no one answers a call. No further calls are then distributed in the queue until at least one user has manually reset his or her status.*

Name	Description
Announce queue position	Select **Yes** in the dropdown list if the caller should be informed of the queue position in regular intervals. Select **No** to turn off position announcements for the queue.
Offer callback in queue	Select **Yes** from the dropdown list to activate the callback function. An announcement is then played for the caller every 90 seconds to indicate the callback function. The queue checks every 30 seconds whether a voice announcement should be played. Select **Yes** from the dropdown list to activate the callback function. • **Prompt after at least X seconds**: Specify in seconds the minimum interval at which a voice announcement should be played (90 standard). VisualGroups checks every 30 seconds if the last voice announcement was longer than X seconds ago. If this is the case, a new voice announcement is played. • **Connect to**: Optionally, specify an internal phone number to use custom logic to followup the callback request. In addition to the callback request, the caller is then also forwarded to the specified internal number when he or she presses the corresponding callback request key. • **Using voiceprompt**: If you have previously specified an internal call number, select a file from the dropdown list for the **Voice announcement** that the caller hears at the configured interval. See *Callback function*, page 22.
Ignore calls connected for less than X seconds	Set a time in seconds for the queue that must be reached at least before calls are included in the statistics. If a call in the queue is shorter than 'X', it is not included in the statistics.

Name	Description
To enable opening/ closing times	Select Yes n the drop-down list to activate the 'Availability Period' function for the queue, see *Opening/closing times*, page 22. You can now add an availability time and a breaktime for the respective day below by clicking on the corresponding check boxes and define an opening and closing time. Enter a phone number to which callers who call outside of the availability times are forwarded.
Enable call categoriza-tion	This function is only visible if you have defined at least one call category. To create prede-fined categories see *Categorization of calls*, page 27. Select Yes from the dropdown list to have calls categorised by the user. You can now assign the available call catego-ries to the queue below via drag and drop or by selecting the checkbox and clicking the corresponding arrow button.
Enable default catego-rization after wrap-up time expires	If a user's wrap-up time expires without them categorizing the call, the call can be automati-cally assigned to a default category. To activate the function, with the call catego-ries switched on, select Yes from the dropdown list. Below you can then select a Default category from the dropdown list, into which calls that have not been categorized in time will be automatically assigned. See also *Categorization of calls*, page 27.

4 If applicable, select a group from the dropdown list whose users you want to assign to the queue.

5 Activate the checkbox in the line of the user you want to add or activate the checkbox in the **User name** line to add all users in the list. You can also assign users via drag and drop.

ⓘ If you have selected **Skill based** as the call strategy, the users are auto-matically assigned on the basis of the assigned skills. All users who have been assigned the skills required for the queue are then assigned.

✓ You can enter a name into the search bar to search for a user.

6 Click on the "Arrow" symbol to assign the selected users to the queue. You can also assign users via drag and drop.

7 Click on **Save**.
   ✓ The settings for the queue are applied. A VisualGroups user for the queue may have been created automatically in SwyxWare. You can now assign a number to the queue, *Assign queue to phone number*, page 23.

How to delete a queue

1 In the menu select **Administration | Queues**.
   ✓ The list of your queues appears.

2 Activate the checkbox in the line of a queue and click on **Delete**.
   ✓ The queue is no longer available and is no longer recorded in the usage report.

2.2.2   Call Strategies

With VisualGroups, several call strategies are available:

Strategy "None": Function inactive

Strategy "Intelligent": Default

Strategy "Simple": Based on the number of connected calls

Strategy "Pure": Based on the number of connected queue calls

Strategy "Skill based": Distribution of callers based on to skills & skill level of the users

Strategy "Parallel": Call is placed simultaneously to all users in the queue

For each user, a timestamp **Waiting since** is used to calculate the time the user is already waiting. For each VisualGroups call all users are evaluated and sorted. The call is delivered to the longest waiting user first.

The timestamp **waiting since** is reset differently for each strategy based on the settings described under **Technical Information**.

The following examples illustrate the impact of the corresponding call strategies based on four users (A,B,C and D) when all are available and no specific criteria have been defined.

At the first login of each day, the timestamp **waiting since** is reset.

> For all call strategies except "Parallel" no calls will be delivered while a user is in a call. Changing the **Disable Secondary Call** setting in SwyxIt! does not affect this behaviour. If you have disabled secondary calls and manually accept an additional call from a queue during a call, the second call will be disconnected.

Strategy "None": Function inactive

Technical Information

Calls in the queue are not actively distributed among the available users. Users must manually select incoming calls from the queue to pick them up.

Strategy "Intelligent": Default

Technical Information

Triggers that reset the timestamp **waiting since**:

Handling calls (calls via SwyxWare and VisualGroups)

- initiating a call (outbound)
- disconnecting a call (outbound)
- receiving a call (inbound)
- picking up a call (inbound)
- disconnecting a call (inbound)

Examples:

1. VisualGroups scenario:

- Order of call 1 = A,B,C,D

    The call rings at A and is not answered.

    The call rings at B, is connected and then disconnected.
- Order of call 2 = C,D,A,B
2. Non-VisualGroups scenario:

    Call 1 does not come from the VisualGroups queue.

    The call rings at A, is connected and then disconnected.
- Order of call 2 = B,C,D,A
3. Non-VisualGroups scenario 2:

    Call 1 does not come from the VisualGroups queue.

    The call rings at A and is not answered.
- Order of call 2 = B,C,D,A

Strategy "Simple": Based on the number of connected calls

Technical Information

Triggers that reset the timestamp **waiting since**:

Handling calls (calls via SwyxWare and VisualGroups)

- disconnecting a call (outbound)
- disconnecting a call (inbound)

Examples:

1. VisualGroups scenario:
- Order of call 1 = A,B,C,D

    The call rings at A and is not answered.

    The call rings at B, is connected and then disconnected.
- Order of call 2 = A,C,D,B
2. Non-VisualGroups scenario:

    Call 1 does not come from the VisualGroups queue.

    The call rings at A, is connected and then disconnected.
- Order of call 2 = B,C,D,A

3. Non-VisualGroups scenario 2:

   Call 1 does not come from the VisualGroups queue.

   The call rings at A and is not answered.

● Order of call 2 = A,B,C,D

Strategy "Pure": Based on the number of connected queue calls

Technical Information

Triggers that reset the timestamp waiting since:

Handling VisualGroups calls only

● disconnecting a call (inbound)

Examples:

1. VisualGroups scenario:

● Order of call 1 = A,B,C,D

   The call rings at A and is not answered.

   The call rings at B, is connected and then disconnected.

● Order of call 2 = A,C,D,B

2. Non-VisualGroups scenario:

   Call 1 does not come from the VisualGroups queue.

   The call rings at A, is connected and then disconnected.

● Order of call 2 = A,B,C,D

Strategy "Skill based": Distribution of callers based on to skills & skill level of the users

From VisualGroups 1.6.0.0 on, with an Enhanced licence you can use the call forwarding strategy Skill based to automatically assign callers to the most appropriate user. VisualGroups uses pre-configured 'Skills' and assigned 'Skill levels' to automatically select the best available user for a call.

For the configuration of skills and skill levels, see *Skill based routing*, page 22.

When a call is processed by a queue, all assigned VisualGroups users are taken into account. The call strategy prioritises users with higher skill levels over users with lower skill levels, also taking into account availability based on SwyxIt! status. If a user has selected Offline or DND, it is skipped.

The order of skill levels is:
Hero > Expert > Senior > Junior. Users who have not assigned all the skills required for the queue will not receive calls from this queue. If several available users have the same skill level, the "normal" call strategy takes effect according to the longest inactive principle.

If several skills are assigned, the highest skill level a user has in a skill counts for the call distribution. There is no prioritisation or summation of skills.

> If no skills have been assigned in a queue with skill based routing, all agents are taken into account.

> When using skill based routing, the user's wait and time criterion are disabled for the specific queues. However, a user can still use the Call dispatch option to enable or disable routing of a specific queue.

Example:

Users	Skill 1 level	Skill 2 level	Idle since
A	Hero	Expert	2 minutes
B	Expert	Hero	10 minutes
C	Expert	Senior	15 minutes
D	[not assigned]	[not assigned]	35 minutes

● Order on the next call: B > A > C

   User A and B both have the highest skill level Hero in a skill. User B is idle for longer, therefore B > A. User C comes after users B and A due to his lower skill level.
   Even though user D has the longest waiting time, he does not receive

the call because he has not been assigned the skills required for the queue. User D is not assigned to the queue as a user.

Strategy "Parallel": Call is placed simultaneously to all users in the queue

If the call strategy Paralle" is used for the queue, a call rings simultaneously for all users in the queue. A group call is mimicked. The call can be picked up by any user in the queue.

ⓘ When using parallel routing, the user's wait and time criterion are disabled for the specific queues. However, a user can still use the Call dispatch option to enable or disable routing of a specific queue.

ⓘ If you have allowed secondary calls via SwyxIt!, you will also receive another group call during an active call when using parallel routing.

2.2.3 Last agent routing

As administrator you can configure the last agent routing method for the queue, see *This is how you create and edit a queue*, page 14 section *Last agent routing*, page 15.

With the 'Last Agent Routing' dialing principle, you can determine whether a caller who calls again within a predefined time is reconnected to the user he has previously spoken to.

The advantage of this function is that the caller does not have to describe his request to an additional employee again. As a result, service performance can be improved and capacity within the queue can be saved.

The following modes can be accessed:

Mode	Description
Off (default setting)	The call distribution remains unchanged.

Mode	Description
On with priority	A caller who calls again within the configured period of time is handled differently from other calls in this queue. VisualGroups connects the caller with the user who handled his previous call. Recurring calls have a higher priority than other calls in the queue. This means that a caller who calls again within the defined time period takes the first position in the queue of the user with whom he has previously spoken. The call is only delivered to other users in the queue after the set time has elapsed.

ⓘ If the user to whom a recurring Last Agent Routing call is to be delivered is busy or unavailable or cannot be reached, VisualGroups will wait for the user to be available until the predefined time has elapsed. When the defined period has elapsed, the call is added to the queue according to the default distribution.

ⓘ If a user rejects a recurring call, a new call to this number is handled with the "normal" call strategy and is not delivered with priority to the last agent.

2.2.4 Adding, editing and deleting users

You can add SwyxWare users to VisualGroups and assign queues and VisualGroups skin.

ⓘ The synchronization with the SwyxWare Administration takes place with every login in the VisualGroups web portal.

ⓘ If a user is assigned to several queues and these queues have different skin configuration, the skin VisualGroups enhanced will be selected automatically.

ℹ️ You can define for all users on the same SwyxServer the skin as system-wide standard. For further information see the SwyxWare documentation.

To search and filter for users

1 In the menu select **Administration | Users**.

2 In order to search for a user, enter a name in the search bar.
   You can also switch the sort order to ascending or descending by clicking the arrow icon, and customize the sort order by clicking on column headers. The arrow symbol becomes visible when you move the mouse cursor over the column header.

How to add users

1 In the menu select **Administration | Users**.
   ✓ The list of all VisualGroups users appears with the following information:
   - Username
   - SwyxIt! Status information for a user
   - Time at which the user was last active and accepted a call
   - Number of assigned queues

2 Click on **Add**.

3 You can define the following settings:

Name	Description
Skin	From the dropdown list select the VisualGroups skin you want to assign to the user.
Wrap up time	From the dropdown list, select the required mode for the wrap-up time. See *Wrap-up time*, page 21.

Name	Description
Available and Assigned Queues	Activate the checkbox in the line of the queue you want to assign the user or activate the checkbox **Queue** in the headline to assign the user to all queues. Click on the "Arrow" symbol to assign the user to the selected queue. You can also assign users via drag and drop.
Assigned Queues	Select the criteria from the dropdown list for the automatical call delivery of a user. You can define the wait and time criteria as well as the call dispatch for each queue.

✅ You can enter a name into the search bar to search for a user.

4 Click on **Save**.

How to edit users

1 In the menu select **Administration | Users**.
   ✓ The list of all VisualGroups users appears with the following information:
   - Username
   - Status information for a user
   - Time at which the user was last active and accepted a call
   - Number of assigned queues

2 Activate the check mark in the line of the corresponding user and click on **Edit**.

3 You can define the following settings:

Name	Description
Skin	From the dropdown list select the VisualGroups skin you want to assign to the user.

Name	Description
Wrap-up time	From the dropdown list, select the required mode for the wrap-up time. See *Wrap-up time*, page 21.
Available and Assigned Queues	Activate the checkbox in the line of the queue you want to assign the user or activate the checkbox Queue in the headline to assign the user to all queues. Click on the "Arrow" symbol to assign the user to the selected queue. You can also assign users via drag and drop.
Assigned Queues	Select the criteria from the dropdown list for the automatical call delivery of a user. You can define the wait and time criteria as well as the call dispatch for each queue.

For further information see the SwyxIt! documentation.

You can enter a name into the search bar to search for a user.

4 Click on Save.

How to delete a user

1 In the menu select Administration | Users.
  ✓ The list of all VisualGroups users appears.
2 Activate the check mark in the line of the corresponding user and click on Delete.
  ✓ The user can no longer use VisualGroups and is no longer recorded in the usage report.

2.2.5   Wrap-up time

As an administrator, you can set the mode in which a user is displayed his wrap-up time, the so-called wrap-up time, see *Wrap up time*, page 20 or *Wrap-up time*, page 21.

The following modes can be accessed:

Mode	Description
(Disabled)	To disable the function, set the wrap-up time to 0 seconds in the queue settings. See **Wrap-up time for users**, page 14.
Not visible	No wrap-up time is displayed to the user in the client. The waiting time set for queues is still active.
Visible, not adjustable	The user's wrap-up time is displayed in real-time in the client. The user cannot adjust the wrap-up time. Wrap-up time active: 2:26 m. Wrap-up time inactive
Visible, adjustable	The user's wrap-up time is displayed in real-time in the client. The user has options to stop or extend the wrap-up time. Wrap-up time active: 4:37 m. ⊘ ++ + Wrap-up time inactive ⊘ ++ +
Visible, automatic infinite	The wrap-up time remains active until the user clicks the Stop button in their client. You can define the function for users and queues. If the unlimited wrap-up time has been set for the user or queue, it is given priority over other modes. The user's client permanently displays the wrap-up time as "active" until the user stops it manually.

Behaviour of the wrap-up time with activated call categorization

If you have activated the function "Call categorization", see *Categorization of calls*, page 27, note the following effects on the wrap-up time:

• The configured wrap-up time starts automatically as soon as a call is ended. The timer is also displayed in the call categorisation window.

• If a user categorises a call before the wrap-up time has elapsed, the wrap-up time continues as normal. The user then has exactly the configured wrap-up time available.

- If a user does not categorise a call before the wrap-up time expires, the wrap-up time is extended until the call is categorised. The user then has additional time to categorise the call.

2.2.6   Callback function

The callback function allows a caller in the queue to signal a callback request. A caller can then be called back by a VisualGroups user and does not have to wait in the queue. The function is available in the Enhanced and Standard license.

An audio message points the function out to the caller in a queue with activated callback function at an interval of about 90 seconds. The caller can signal the callback request by pressing the "#" key on his telephone. The call is disconnected and a user can call back when he is available again. See 3.9 **Callback request: Calling callers back**, page 34.

To configure the callback function for a queue, see *This is how you create and edit a queue*, page 14.

2.2.7   Opening/closing times

You can set daily availability times for each of your queues. You can specify the availability start, break time and availability end individually for each day.

- The function is disabled by default for queues.
- Callers who call outside the availability times will be forwarded to another (internal or external) number. The entry of a call number for forwarding is necessary to use the function.
- When activated, the default availability time is Monday - Friday between 08:00 to 16:30 and the default break time is 12:00 to 13:00.
- The break times are optional. Only one break period can be set for each day.
- The queue remains "offline" if the **opening/closing times** function is activated, even if a user logs in outside the availability time.

In order to configure this function, see *To enable opening/closing times*, page 16.

2.2.8   Skill based routing

With the skill based routing, callers in a queue can be automatically forwarded to the user with the highest skill level of the skills selected for a queue. The order of skill levels is:
Hero > Expert > Senior > Junior.

This chapter describes the configuration and assignment of skills and skill levels.

To add a new skill

To edit a skill

To assign Skills and Skill levels to users

To set or edit the function for a queue, see *Creating, editing and deleting queues*, page 13.

For more information on the call distribution of the skill based routing, see *Strategy "Skill based": Distribution of callers based on to skills & skill level of the users*, page 18.

To add a new skill

1   In the menu, select **Administration | Settings | Skills**.
    ✓ The list of your existing skills appears.
2   Click on **Add**.
3   Enter a name for the skill you want to add.
4   Click on **Save**.
    ✓ A new skill is created. You can now assign the skill to a user.

To edit a skill

1   In the menu, select **Administration | Settings | Skills**.
    ✓ The list of your existing skills appears.
2   Select the checkbox in the row of the skill you want to edit and click **Edit**.
3   You can change the name in the input field.
4   You can also assign users to the skill here. To do this, activate the checkboxes in the rows of the desired users under **Available users** and click the corresponding arrow icon to assign them to the skill.

5 For the assigned users, in the **Skill level** column, choose between the skill levels **Junior**, **Senior**, **Expert** or **Hero** from the dropdown list. With the skill levels you indicate how confident or experienced the selected user is in the respective skill. Call dispatch for skill based queues is based on the selected skill levels, see *Strategy "Skill based": Distribution of callers based on to skills & skill level of the users*, page 18.

6 Click on **Save**.
   ✓ The existing skill will be changed. The skill is updated immediately for all assigned users and queues.

To delete a skill

⚠️ Note that deleting skills that have already been assigned to users or queues can affect the behavior of the queue. If no skills are assigned to a queue, all users are again factored in for routing.

1 In the menu, select **Administration | Settings | Skills**.
   ✓ The list of your existing skills appears.

2 Select the checkbox in the row of the skill you want to remove and click **Delete**.
   ✓ The skill is deleted.

To assign Skills and Skill levels to users

1 In the menu select **Administration | Users**.
   ✓ The list of all VisualGroups users appears.

2 Select the checkbox in the row of the user to whom you want to assign a skill and click **Edit**.

3 Under **Available skills**, select the check box in the row of the desired skill and click the corresponding arrow icon to assign the skill.

4 In the **Skill level** column, choose between the skill levels **Junior**, **Senior**, **Expert** or **Hero** from the dropdown list. With the skill levels you indicate how confident or experienced the selected user is in the respective skill. Call dispatch for skill based queues is based on the selected skill levels, see *Strategy "Skill based": Distribution of callers based on to skills & skill level of the users*, page 18.

5 At the bottom, click **Save** to confirm your entries.
   ✓ The settings are applied.

💡 You can also add users via the **Edit skill** page, see *To edit a skill*, page 22.

2.2.9 Assign queue to phone number

You have to assign a number to each user that was created for your queue.

For further information see the SwyxWare documentation, chapter **Numbers and Number Mappings**.

2.2.10 Use own audio file for queue

If you have installed the SwyxECR option pack you can use own announcements for your queues. To do this, you must put a Call Routing rule with the desired announcement before the VisualGroups script.

For further information see the SwyxWare documentation, chapter "configuration of SwyxServer" See also the Swyx Extended Call Routing User Documentation.

2.2.11 Create, edit and request regular reports

VisualGroups usage reports are created for a defined time period and sent to the given e-mail address. You can create different types of user reports (daily, weekly, monthly) and define individual settings for each of these usage reports. You can also request reports on past periods and generate them on demand.

ℹ️ In some cases the start and end time of the logging time may differ from the defined time. The logging time is automatically extended if calls are detected outside the defined time.

ℹ️ Reports are created and sent via email within 30 minutes after the defined logging time.

How to create and edit reports on a regular basis

1 Select **Administration | Reporting | Reports** in the main menu of the web portal.
   ✓ The list of your VisualGroups usage reports appears with following information:
   ● Name of the report
   ● Interval
   ● Time when the last usage report was created

2 Click on **Add** or activate the checkbox in the line of an existing usage report and click on **Edit**.

3 Additionally to the settings in the configuration wizard (*Define the reporting settings:*, page 12) you can edit the following settings:

Name	Description
Report name	Enter a name for the usage report.
Language	Select the language for the reports from the dropdown list.
Report type	Use this interval to specify the intervals at which usage reports are to be generated.
Execute on & Time of execution	Select a time for sending the regular reports.
Reporting time interval	Specify the interval at which data is summarized ("averaged") in the report. The shorter the interval, the more results are listed in a usage report.
Logging time	Enter the period to which you want to restrict reporting.
Recipient's email address (CC/BCC)	Enter the email address(es) to which the Carbon Copy or Blind Carbon Copy reports should be sent.
User information in report	Click on the checkbox to show or hide user-specific information in the reports. This information includes the logon data of the users as well as their individual call acceptance statistics and evaluation.

⚠ When saving and processing personal data, observe the respective applicable legal data protection regulations.

4 By assigning the available queues, you can specify which queue(s) will be included in the report. You can assign the selected queue(s) using the arrow icons. You can also assign queues via drag and drop.

ℹ If you assign multiple queues, an additional report is sent with the total of all assigned queues.

5 In order to do this, select the checkbox for the desired queue(s) and click on the corresponding arrow.

6 Click on **Save**.
   ✓ The report will be created according to your settings and sent to the specified email address(es).

This is how you request a report (resend reports)

1 Select **Administration | Reporting | Request a report** in the main menu of the web portal.
   ✓ The request a report page will be shown.

ℹ The available time periods are eventually limited by the configured data protection settings.

2 Select the desired report from the **Report configurations** dropdown list.

3 Select the desired period of the report from the **Time frame** dropdown list.

4 Click on **Request**.
   ✓ The report is now in progress and will be delivered within 30 minutes.

How to delete a report

1 In the menu select **Reporting | Reports**.
   ✓ The list of your VisualGroups reports appears.

2 Activate the checkbox in the line of the corresponding usage report and click on **Delete**.

> ⓘ The directory of where the reports can be deleted is described in the column *PDF files with reports*, page 7.

2.2.12 Editing SMTP server settings

You can edit your SMTP settings that are required for sending of Visual-Groups reports.

> ⓘ If sending of emails with reports have failed, a new transmission attempt occurs in one hour. There is a maximum of 5 transmission attempts for every report.

To edit the SMTP-Server-Settings

1 In the menu select **Reporting | SMTP Server**.
   See also 2.1 *Configuring initially*, page 12, step **(10)**.

2.2.13 Set the language of the user interface and number of VisualGroups lines in the client

To edit a skin, see chapter „Editing Skin" or „The Use of Skins" in the SwyxIt! documentation.

In the editor mode there are VisualGroups placeholders for the queues view (1, top right) and if available the statistics area (2, down right).
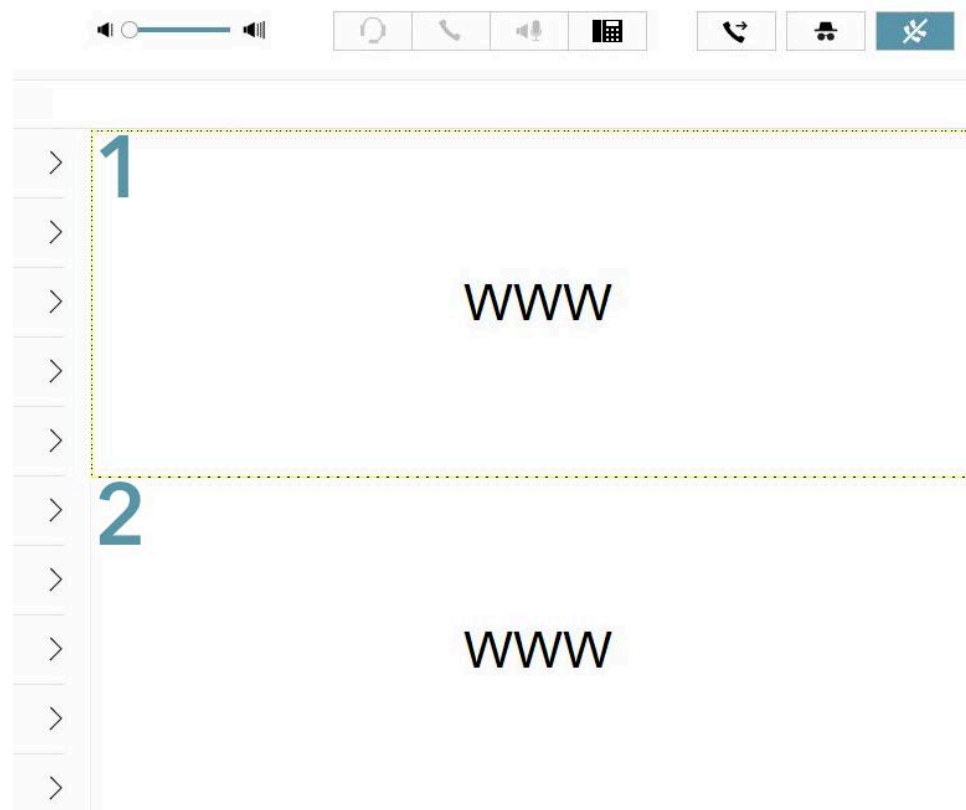
1 Select the entry you want.

2 In the editor mode click on the tab **SwyxIt! Web Extension**. For Netphone click on the tab **Netphone Web Extension**.

3 Select **loading skin** in the dropdown list.

4 Click right behind the parameter 'language='.

5 Replace the value following to the mark "=" with one of the following values.

Parameter	Value
[language=XX-xx]	'DE-de', 'EN-gb', 'FR-fr', 'IT-it', 'NL-nl'.

> **i** For the first change replace %{HKEY_LOCAL_MACHINE\SOFTWARE\Swyx\ClientSetup\,Culture} with one of the language parameters.

6 Close the window.

7 If necessary repeat the steps **(1)** to **(6)** to edit the other area.

8 You can also configure the number of lines to be displayed in the client. To do this, enter a value for the following parameter at the end of the URL:

Parameter	Description
[rows=xx]	For 'xx', enter the number of desired lines in digits. For example, enter '20' to enlarge the display to 20 lines.

> **i** Make sure that you adjust the size of the Web Extension accordingly if you want to integrate the changed number of columns in a SwyxIt! Skin. To adjust the size of the Web Extension, enter a value for the parameter 'zoom=xx'.

9 Click on **File | Skin | Edit** to leave the edit mode. Save the skin to save the changes.

2.2.14 Privacy settings

You can define in the web portal when data protection relevant data is to be deleted.

1 Select **Administration | Settings | Retention** in the main menu of the web portal.
   ✓ The page for requesting reports will be shown.

2 You can set the storage duration in days for the following settings:

Name	Description
Caller information (Default 7 days)	Information of the queue caller: • Caller number • Caller name • Date and time
Mail information (Default 7 days)	Information regarding the email based dispatch of PDF reports: • Mail addresses for reporting. • Date and time
User information (Default 62 days)	Information of the queue users: • Swyx usernames • Call statistics • Date and time

3 Click on **Save**.
   ✓ The settings are now saved and will be applied automatically.

2.2.15 LDAP Search Query

VisualGroups uses LDAP information to display caller information if they are not included in the global phonebook. You can change the LDAP query. This allows you to perform searches in specific LDAP nodes or apply a custom filter.

1 Select **Administration | Settings | LDAP** in the main menu of the web portal.
   ✓ The LDAP configuration page opens.

2 You can define the following settings:

Name	Description
Enable LDAP	Select the checkbox to enable or disable the LDAP function.
LDAP server & port	Enter the server address and port to which you want to connect. The address can be a hostname or an IP address.

Name	Description
Advanced Query Settings	You can specify a custom LDAP query. Activate the checkbox to enable the input field. The default search query is '(searchNumber={0})' which is applicable for any Estos MetaDirectory LDAP server. You can edit this query string according to your requirements. The filter mechanism adheres to the LDAP search filter syntax standards. '{0}' is used as the placeholder for the CallerID. *Example:* *(&(dc=meta)(searchNumber={0}))*
Use TLS	Activate the checkbox to enable TLS encryption of the LDAP connection.
Enable authentication	Select the check box to enable authentication with user name and password.
User name, Password	Optional: Enter your user name and password if authentication is enabled.

3 Click on **Save**.
  ✓ The settings are now saved and are automatically used for each incoming call.

2.2.16 Set default language

You can set a default language in the Web portal for displaying new queues and reports. You can also customize the language for queues, wallboards and reports individually.

1 Select **Administration | Settings | Language** in the main menu of the web portal.

2 Select the desired language.

3 Click on **Save**.
  ✓ The settings are now saved and will be applied automatically.

2.2.17 Categorization of calls

Administrators can analyse calls based on the assignment of categories by users in Swyx Analytics using the PDF reports. The categorization can be sorted via drag and drop and assigned individually for each queue, see *Enable call categorization*, page 16.

1 Select **Administration | Settings | Call categories** in the main menu of the web portal.
  ✓ A list of your call categories opens.

2 Click **Add** to create a new conversation category or **Edit** to rename an existing call category. If you want to remove a call category, click on **Delete**.

3 Enter the desired name for the call category.

4 Click on **Save**.
  ✓ The call category was successfully created.

After you have assigned the category to a queue, see *Creating, editing and deleting queues*, page 13, it can be selected by users after a call in the queue for categorization, see 3.8 **Categorizing calls**, page 34.

For effects of call categorization when wrap-up time is enabled, see. *Behaviour of the wrap-up time with activated call categorization*, page 21.

You can set a default category for a queue into which calls that users do not categorise before the wrap-up time expires are automatically assigned to. See *Enable default categorization after wrap-up time expires*, page 16.

2.2.18 Running VisualGroups over HTTPS/SSL

When you want to access the VisualGroups portal/wallboards from outside your local network it is recommended to enforce HTTPS for all external traffic to VisualGroups.

See   service.swyx.net/hc/en-gb/articles/360008304879-TLS-SSL-Activation-in-VisualGroups (You may need to be logged in to view the content).

Prerequisites:
- Domain name which points to the VisualGroups machine
- Valid SSL certificate
- Administrator access to the machine and IIS manager

ℹ️ VisualGroups is still available via HTTP from the local host and network after HTTPS/SSL configuration.

2.2.19 Access VisualGroups via Remote Connector

If you do not have VisualGroups installed on the same machine as your SwyxWare and want to access the service via Remote Connector, you need to add TCP Forwarding via Registry Key to the Remote Connector.

See service.swyx.net/hc/en-gb/articles/360017729619 (You may need to be logged in to view the content).

2.2.20 Permissions of the administration profiles

For information about the administration profiles in SwyxWare see the SwyxWare documentation for administrators, chapter **Profiles | Adminis-tration profiles**.

The User Operator and Call Status Operator profiles give you supervisor access within the VisualGroups portal.

The profiles have the following permissions for VisualGroups:

- **Group 1** System Administrator
- **Group 2** Backoffice Administrator, User Administrator & User Opera-tor
- **Group 3** Call Status Operator

	Permission	Group 1	Group 2	Group 3
Users	Displaying	✓	✓	✓
	Editing	✓	✓	✓
	Creating	✓	✓	
	Deleting	✓	✓	

	Permission	Group 1	Group 2	Group 3
Queues	Displaying	✓	✓	✓
	Editing	✓	✓	✓
	Creating	✓		
	Deleting	✓		
Reports	Displaying	✓	✓	✓
	Editing	✓	✓	✓
	Creating	✓	✓	✓
	Deleting	✓	✓	✓
Wallboard	Displaying	✓	✓	✓
	Editing	✓	✓	✓
	Creating	✓	✓	
	Deleting	✓	✓	✓
System settings	LDAP	✓	✓	
	Data retention	✓	✓	
	SMTP	✓	✓	
	Call categories	✓	✓	

3   Using SwyxIt! with VisualGroups

This chapter describes the client sided usage of VisualGroups. This requires the server side installation as described in 1 *Installing VisualGroups*, page 5.

For requirements and instructions related to the custom installation of SwyxIt!, please refer to the SwyxIt! documentation, chapter „Installing and Uninstalling SwyxIt!".

You can define criteria for the forwarding of queue calls to your internal number but you can also answer calls manually.

Via settings symbol ≡ you can display further settings.

Via filter symbol you can display or hide queues. Therefore, the information on the tabs depends on the selected queues. The filter symbol indicates if there is an active filter.

Filter symbol	Description
	No active filter; information on all queues is displayed
	Active filter; information on the selected queues is displayed

Selecting a VisualGroups skin

VisualGroups skins are available in SwyxIt!. To be able to use options you may have to select one of the following skins in SwyxIt! under "Settings | User Profile | Skin":

> Probably your administrator has already assigned you the corresponding skin.

- "SwyxIt! 12 [5x VisualGroups Standard].cab" (excl. statistics)
- "SwyxIt! 12 [5x VisualGroups Enhanced].cab" (incl. statistics)

> The selected skin is also available to you on other computers you log into with your Windows login data. The skin is loaded automatically there.

See also help.swyx.com/cpe/latest.version/Client/Swyx/en-US/help/Skins.22.01.html#.

> VisualGroups regularly scans whether a SwyxIt! user has loaded a VisualGroups skin and is therefore considered a VisualGroups user. If this user changes from a SwyxIt! skin with VisualGroups to a skin without VisualGroups, it may take about one minute until no more VisualGroups calls are delivered to this user. Restart SwyxIt! to apply the status immediately.

> **Note for CTI pairing:** VisualGroups is currently optimized for the use of SwyxPhone L6x, L7x and Yealink Phones (T31G, T4xS, T5xW & CP920, CP925, CP960, CP965). If a user uses other telephony devices assigned to him for answering calls, the call statistics may not be fully available.

3.1   Logging in or out of queues

Login via SwyxIt!

You log in to your queues by selecting a VisualGroups skin in SwyxIt!. See *Selecting a VisualGroups skin*, page 29.

If you have already selected a VisualGroups skin, you will also be logged in to your queues when you log in to SwyxIt!.

Logout via SwyxIt!

You will be logged out of your queues when you exit SwyxIt!, log out of SwyxIt! or select a skin without VisualGroups. See *Selecting a VisualGroups skin*, page 29.

Log in and log out via terminal device

As of VisualGroups 1.9 you can also log in/out of your VisualGroups queues via your desk phone, SwyxMobile App or Swyx Desktop for macOS.

> You log in to VisualGroups as a user, not your phone. When you are logged into VisualGroups, incoming calls are therefore signalled on all your devices in parallel.

> ℹ️ The call number for the queue login is assigned to the user **VG_login_user**. It can be changed via SwyxWare or Swyx Control Center.

To log in via a terminal device other than SwyxIt!

1 On your telephone, dial the call number for the queue login with the suffix ***11***.
   ✓ You are logged in to all your queues.

   Example:

   If the user VG_login_user has the phone number 600, dial 600*11* to log in.

How to log out from a terminal other than SwyxIt!

1 On your telephone, dial the call number for the queue login with the suffix ***10***.
   ✓ You are logged out of all your queues.

> ⚠️ Logging off via a terminal is only carried out if you are not logged on to VisualGroups via SwyxIt!.

3.2 Defining the settings for Windows Server

In order for the web extension to be displayed correctly in SwyxIt! you may need to add your SwyxServer address as "trusted" in the Windows settings and enable "Initialize and script ActiveX controls not marked as safe for scripting".

1 Open Internet Explorer (not Edge).

2 Click on the cogwheel symbol at the top right and select **Internet options | Security**.

3 Select **Trusted sites | Sites**, enter your SwyxServer address in the input field, click on **Add** and then on **Close**.

4 Click on **Custom level…** and enable **Initialize and script ActiveX controls not marked as safe for scripting**.

5 Click on **OK** to save your settings.
   ✓ You can close Internet Explorer and refresh the VisualGroups pages if necessary.

3.3 User interface

VisualGroups is displayed on the right next to the SwyxIt! or Netphone speed dials.

The "Queues" tab

On this tab the following information on calls in the selected queues is displayed:

Queues			Missed	Criteria	Users
Name	**Waiting time**		**Caller information**		
Helpdesk TAP	0:48 ►		+4420123456		
Helpdesk TAP	0:13		John Jones - 3066		

▲ 2 ▼

ℹ The bar under the tab is marked red when your SwyxIt! presence status is set to **Away** or **Do Not Disturb**.

- Name of the queue to which the call has been forwarded

ℹ For a better overview the queues have different colors.

- waiting time the caller has already had so far
- Name and number of the caller

ℹ The caller name is only displayed if the caller is a contact in your local phonebook.

ℹ An arrow between **Name** and **Waiting time** means that the call is forwarded to a user.

See also *Displaying or hiding queues*, page 33.

The "Criteria" tab

On this tab you can define if and, if applicable, how queue calls are automatically forwarded to your internal number.

Queues		Missed	**Criteria**	Users
Queue criteria			**All queues**	≡
Quantity criterion	≡		or	Time criterion ≡
Call dispatch				
Active	≡			

▲ ▼

Defining the waiting time until the automatic call delivery (time criterion)

Defining the number of callers for automatic call delivery (quantity criterion)

Defining the call dispatch

Prioritising incoming calls according to queues

The "Users" tab

On this tab the following information on other internal subscriber is displayed:

Queues	Missed	Criteria	**Users**
Name	**Status**	**Line - Criteria**	
Helpdesk TAP			
John Jones	Available	Idle - Immediately	
Marie Dupont	Available	Busy - Immediately	
Reception			
John Jones	Available	Idle - S>=60 or #>=3	
Sales External			
Marie Dupont	Available	Busy - Immediately	

▲ ▼

- Report name
- Status
- Line state
  - idle or busy
- Criteria
  - S> = Time criterion

- #> = Quantity criterion
- Not active = No "Available user" in statistics and reports, queue calls are not forwarded to the internal number
- Passive = "Available user" in statistics and reports, queue calls are not forwarded to the internal number
  See also *Defining criteria for automatic call delivery*, page 35.

The "Statistics" tab

On this tab the following information on the selected queues is displayed:

ⓘ   Statistics show information per day.

- Answered calls of all users assigned to the queues
- Your own/personal answered calls
- Missed calls of all users assigned to the queues
- Your own/personal missed calls
- Average talk time of all users assigned to the queues
- Your own average talk time
- Callers who are currently waiting
- Average waiting time of all callers

ⓘ   A call counts as missed queue call if it could not be forwarded to a user in the queue. If a user has not deactivated automatic call delivery and does not answer a call, the call counts as a **Missed by me** call for this user.

ⓘ   Missed calls are not part of the calculation of the average waiting time.

- Users with the **Available** status
- Service level (relation between answered and missed calls)

The "Missed" tab

On this tab the following information on missed calls in the selected queues is displayed:

- Time when the call has been cancelled, e.g. when the callers dropped the call.
- Waiting time
- Caller name

ⓘ   The name is only displayed if the caller is a contact in your local phonebook.

- Caller number, see also *Tracking missed calls*, page 39.

3.4 Displaying or hiding queues

By default calls, settings and statistics of all queues your administrator has assigned you to are displayed. You can, however, also display and hide queues.

> Depending on your criteria, calls from queues which your administrator has assigned you to, are still forwarded to your internal number.

How to display or hide queues

1 Click on the filter symbol ▼ under **Queues**.
   ✓ The list of your queues appears.

▼	Queues		Missed	Criteria	Users
All queues					☑
Helpdesk TAP					☑
Sales External					☑
Reception					☑
Sales Internal					☑

2 Activate the checkbox in the line of the appropriate queues.
3 Click on the **Queues** tab to leave the selection view.
   ✓ The calls in the selected queues are displayed.

▼	Queues		Missed	Criteria	Users
Name		Waiting time		Caller information	
Helpdesk TAP	►	0:48		+4420123456	
Helpdesk TAP		0:13		John Jones - 3066	

▲ 2 ▼

3.5 Answering calls manually

Depending on your criteria, calls are forwarded to your internal number and displayed on a SwyxIt! line button. You can, however, also answer calls manually.

How to answer a call manually

1 Click on the **Queues** tab.
   ✓ The currently incoming calls in the selected queues are displayed.

▼	Queues		Missed	Criteria	Users
Name		Waiting time		Caller information	
Helpdesk TAP	►	0:48		+4420123456	
Helpdesk TAP		0:13		John Jones - 3066	

▲ 2 ▼

2 Click on the line of the appropriate call.
   ✓ The call is going to be displayed on one of your line buttons within a few seconds.
3 Click on the line button or pick up the handset.
   ✓ You are connected to the caller.

3.6 Forwarding calls to other users

You can forward calls to other users, see SwyxIt! documentation, chapter „How do I transfer a call without Inquiry?", and „How do I directly forward a call?".

3.7 Deactivating Automatic Call Delivery

You can deactivate the call delivery of calls to your internal number for single or all queues.

To disable automatic call delivery
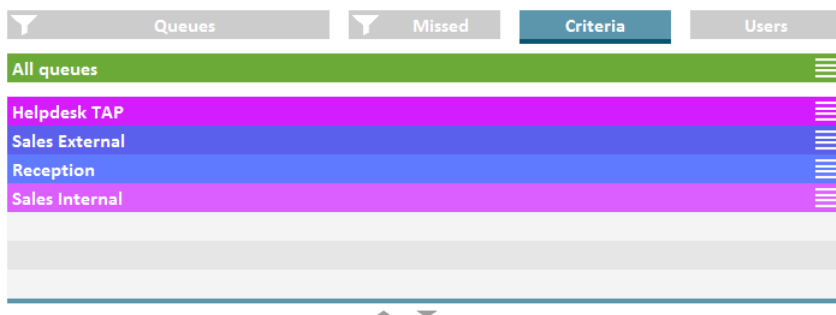
1   Click on the **Criteria** tab.
   ✓ The list of your queues appears.

▼ Queues	▼ Missed	**Criteria**	Users
All queues			☰
Helpdesk TAP			☰
Sales External			☰
Reception			☰
Sales Internal			☰

2   Click on the settings symbol ☰ in the line of the appropriate queue.
   ✓ Your criteria are displayed.

▼ Queues	▼ Missed	**Criteria**	Users
Queue criteria		**All queues**	☰
Quantity criterion ☰		or	Time criterion ☰
Call dispatch			
Active ☰			
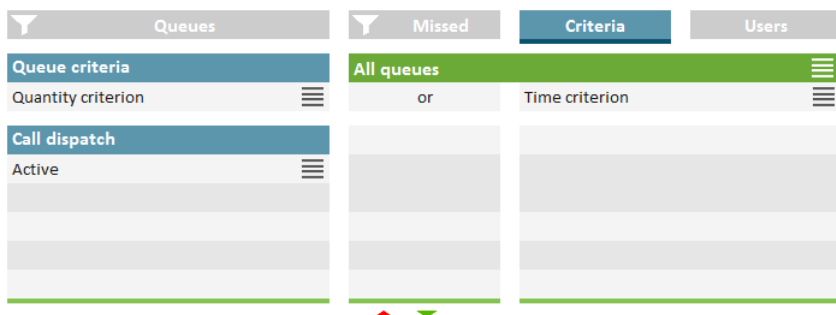
3   Click on the settings symbol ☰ in the **Call dispatch** line.
4   Activate the checkbox in the **Not active** line.
5   Click on any tab to leave the selection view.
   ✓ Calls are not forwarded to your internal number anymore.

ⓘ   You can still answer calls manually.

ⓘ   If you set both, the **No active time criterion** and the **No active quantity criterion** at the same time, automatic call delivery is also deactivated (passive mode).

3.8   Categorizing calls

If your administrator has enabled call categorization for your queue, see 2.2.17 *Categorization of calls*, page 27, you will be prompted after each call to assign it to predefined categories.

1   When a call is finished, a window for categorizing the call opens.

ⓘ   The wrap-up time will continue until you have completed the categorization process.

2   Select a corresponding entry from the preconfigured categorization list.
3   Click **Save and stop wrap-up time** to complete the operation.
   ✓ The call has been successfully categorized. Your wrap-up time is deactivated and you are again considered as available user in the queue.

⚠   If you close SwyxIt! during the process, you have to categorize the call when logging in to the client again.

3.9   Callback request: Calling callers back

For information on the callback function and its configuration, see 2.2.6 *Callback function*, page 22.

An active callback request from a caller is signalled to all users in the queue with a teal symbol next to the phone number.

1   Select the **Missed** tab.
2   Click on the entry of the desired pending callback request.
   ✓ You now call the caller back. The callback request is displayed in the queue with a check mark as completed.

3.10   Defining criteria for automatic call delivery

You can define if and, if applicable, how queue calls are automatically forwarded to your internal number.

⚠️ Queue calls are only automatically forwarded to your internal number if you have set the **Available** status.

ℹ️ If all users of a queue have set both, the time criterion and the quantity criterion **Not active**, calls are forwarded to a number the administrator may have defined. As long as there is at least one user in the queue who has set **No active time criterion** under call dispatch, calls are not forwarded to the number the administrator may have defined.

3.10.1 Defining the waiting time until the automatic call delivery (time criterion)

You can define a waiting time after which queue calls are automatically forwarded to your internal number.

To define a waiting time for automatic call delivery
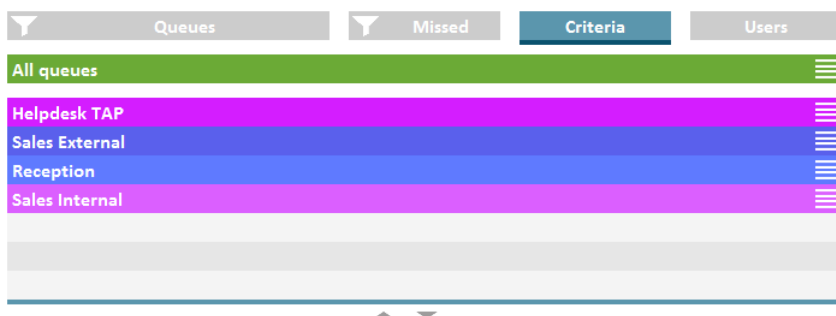
1   Click on the **Criteria** tab.
   ✓ The list of your queues appears.

2   Click on the settings symbol ≡ in the line of the appropriate queue.
   ✓ Your criteria are displayed.
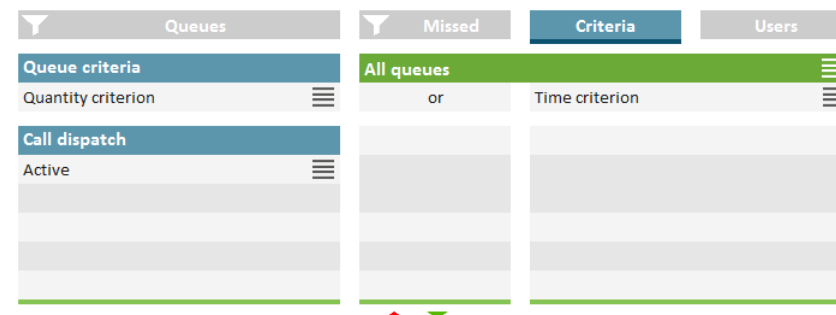
3   Click on the settings symbol ≡ in the line of your current time criterion.

4   Activate the checkbox in the line of the appropriate setting.
   ● Immediately = The next queue call is forwarded to your number without delay (system default)
   ● After n seconds = the next queue call is forwarded to your internal number after the selected time

ℹ️ If **No active time criterion** is set as queue criterion the user is in passive mode.

5   Click on any tab to leave the selection view.

3.10.2 Defining the number of callers for automatic call delivery (quantity criterion)

You can define the minimum number of callers that must be waiting in a queue until queue calls are forwarded to your internal number.

How to define the number of callers for automatic call delivery (quantity criterion)

1   Click on the **Criteria** tab.
   ✓ The list of your queues appears.
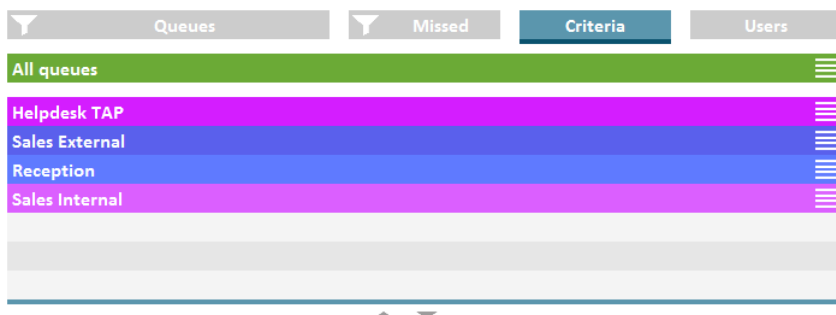
2   Click on the settings symbol ≡ in the line of the appropriate queue.
    ✓ Your criteria are displayed.
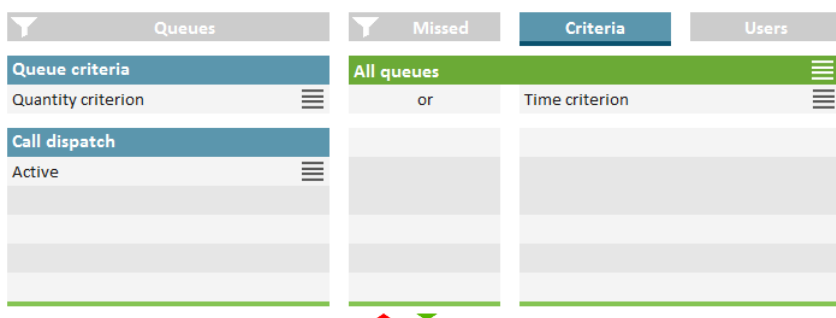
3   Click on the settings symbol ≡ in the line of your current quantity criterion.
4   Activate the checkbox in the line of the appropriate setting.
    • No active quantity criterion = Independent of the number of callers the next queue call is forwarded to your internal number
    • At least n waiting = The next queue call is forwarded to your internal number when the defined number of callers has been reached
5   Click on any tab to leave the selection view.

3.10.3 Defining the call dispatch

You can define if you want to be the first or last user in a queue to whom calls are forwarded or if you want to be displayed as an available user for the queue.

Example: As a team lead you only receive a call if no other user in the queue has answered it. As a receptionist you are the first user in the queue who receives a call before it is forwarded to other departments or supervisors.

ⓘ If you have set your call dispatch to **Not active** your other criteria are deactivated.

The VisualGroups status bar in the client turns orange when you are inactive in a queue.

If the "Automatically remove agents from call distribution for missed calls" function is active for a queue, you may be automatically set to **Not active** and will no longer receive calls from the queue until you manually set your call dispatch here to active again.

How to define the call dispatch
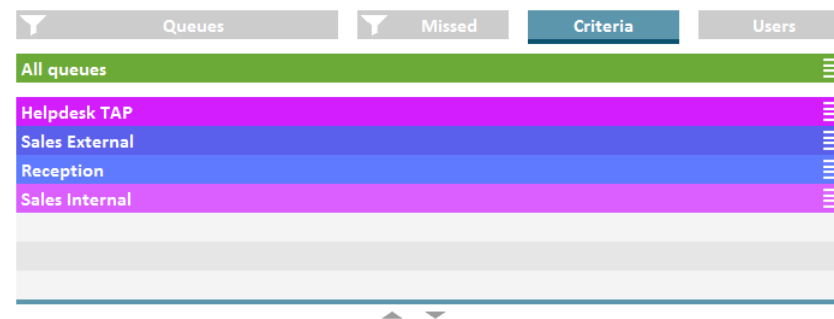
1   Click on the **Criteria** tab.
    ✓ The list of your queues appears.

2   Click on the settings symbol ≡ in the line of the appropriate queue.
    ✓ Your criteria are displayed.
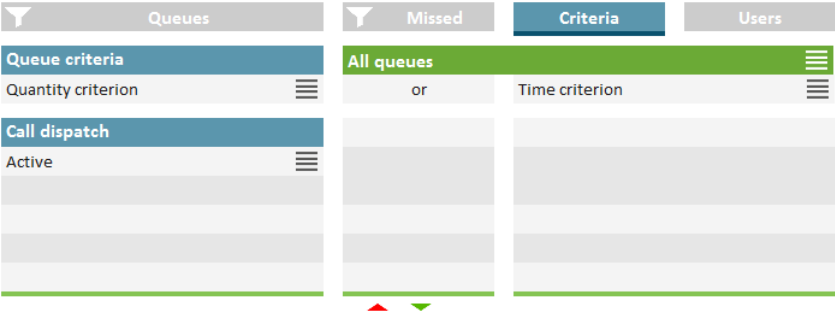
3 Click on the settings symbol ☰ in the **Call dispatch** line.

4 Activate the checkbox in the line of the appropriate setting.

- Active = The next queue call is forwarded to your internal number according to your other criteria
- Receive calls first/last = You are the first or last user in the queue to whom calls are forwarded
- Not active = Calls are not automatically forwarded to your internal number

5 Click on any tab to leave the selection view.

Examples for the combination of time and caller dependent criteria and call dispatch:

> In general, queue calls are delivered according to the "longest inactive" principle, i.e. a queue call is forwarded to the internal number of the user who has had no forwarded call for the longest time.

Quantity criterion (Number of callers)	Time criterion Waiting time	Call distribution	Effect
No active quantity criterion	**Immediately**	**Active**	• Activated by default • The next queue call is forwarded to your internal number without delay • **Available user** in statistics and reports
No active quantity criterion	Immediately	Receive calls first/last	• The next queue call is forwarded to your internal number without delay • You are the first or last user in the queue to whom calls are forwarded • **Available user** in statistics and reports
No active quantity criterion	30 seconds	Active	• The next queue call is forwarded to your internal number when the caller has already been waiting for 30 sec. • **Available user** in statistics and reports
At least 2 waiting	Immediately	Active	• The next queue call is forwarded to your internal number • **Available user** in statistics and reports
At least 2 waiting	30 seconds	Active	• The next queue call is forwarded to your internal number when at least 2 callers are waiting or the caller has already been waiting for 30 sec. • **Available user** in statistics and reports

Quantity criterion (Number of callers)	Time criterion Waiting time	Call distribution	Effect
At least 3 waiting	60 seconds	Receive calls first/ last	• The next queue call is forwarded to your internal number when at least 3 callers are waiting or the caller has already been waiting for 60 sec. • You are the first or last user in the queue to whom calls are forwarded • **Available user** in statistics and reports
No active quantity criterion	No active time criterion	Active	• Calls are not automatically forwarded to your internal number • **Available user** in statistics and reports • Users are displayed as **Passive** under the **Users** tab • Calls are not forwarded to the number the administrator may have defined
Any	Any	Not active	• Calls are not automatically forwarded to your internal number • Not an **available user** in statistics and reports • If there is no other active user in the queue, calls are forwarded to a number the administrator may have defined.

3.10.4 Prioritising incoming calls according to queues

You can change the order in which incoming calls are displayed in the client by prioritizing queues differently.

ℹ This setting does not affect the rules for distributing calls to users in the queue.

To prioritize incoming calls by queue
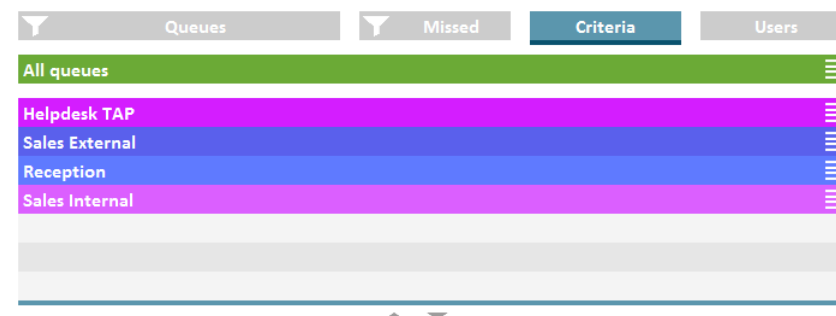
1 Click on the **Criteria** tab.
   ✓ The list of your queues appears.

2 Click on the settings symbol ☰ in the line of the appropriate queue.
   ✓ Your criteria are displayed.
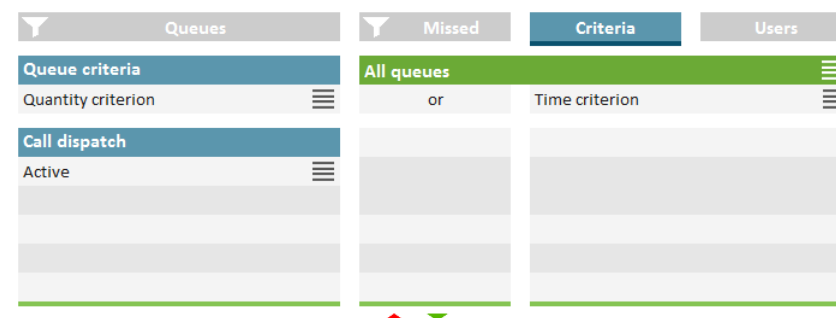
3 Click on the settings symbol ☰ in the **Priority** line.
   ✓ The selection for the prioritization appears.

4 Select the desired priority number for the selected queue. The lower the number, the higher the priority for sorting incoming calls. Calls in the queue with priority "1" are displayed first in the queue list in the client.

ℹ️ If you have set the same value for prioritization for several queues, the sorting is done according to the general rules. The longest waiting caller of the corresponding queues is displayed first in the list.

3.11   Tracking missed calls

You can track missed calls and call callers back at any time.

How to call back a caller after a missed call

1   Click on the **Missed** tab.
   ✓ The list of all missed calls appears in the selected queues.

2   Click on the filter icon.
   ✓ The list of your queues appears.

3   Activate the checkbox in the line of the appropriate queues.

4   Click on the **Missed** tab to display missed calls for the selected queues.
5   Click on a call to call the caller back.
   ✓ You are connected to the caller.

ℹ️ If you have called a caller back, a green checkmark appears between time and waiting time column. You can remove the check mark with a click.

ℹ️ Missed calls from the same caller are marked as "processed" if (later) a successful delivery is made to a user in the queue.
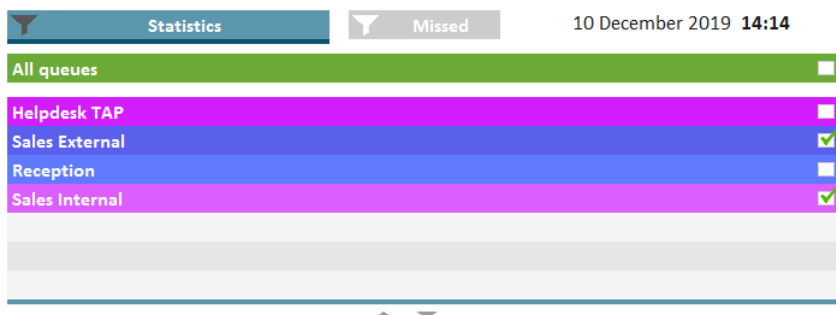
3.12   Filter Statistics

You can define for which queue you want to display statistics.

How to filter statistics

1   Click on the **Statistics** tab.
   ✓ The statistics of the selected queues appear.

2   Click on the filter icon.
   ✓ The list of your queues appears.

3 Activate the checkbox in the line of the appropriate queues.

4 Click on the **Statistics** tab to display the statistics for the selected queues.

3.13 Evaluate reports

VisualGroups reports are created as PDF files per queue. The reports are used to evaluate the performance of a queue on the one hand and the behavior of individual agents on the other. If you have more than one queue you receive an additional report with a summary of all queues.

Queues

Users

Answered calls, Missed calls and Average talk time

> For queues where no calls have been detected in the logging time, there will be no reports. The queues will, however, appear in the summary.

VisualGroups reports include the following reports:

Queues
- Total of all Calls
- Answered calls
- Missed calls
- Average talk time of all users

- Average waiting time of all callers
- Service level: Service level, relation between answered and missed calls (including missed calls due to forwarding)

  Example:
  A queue has a total of 10 calls and, 6 of them have been taken and 4 missed. 2 of the missed calls have been forwarded to a number defined by the Administrator ("Missed due to forwarding").

  In this case the service level is 60%.

> If in this period no calls have been received the service level is 100%.

- Redirection: Cause of the forwarding of calls to a number defined by the Administrator
- Accepted by forwarding: Amount of calls that have been forwarded to a number defined by the Administrator.

> **Forwarding** and **Missed by forwarding** appear only if an appropriate number has been defined and calls have been forwarded in this specific time frame.
> See also the SwyxWare Documentation for administrators.

- Impact of the forwarding on the service level in percent ("-" = negatively)

> Calculation formula: 100% * Answered / (Answered + Missed)

Users

> The user information appear only if the user-specific information have not been deactivated in the report. See *User information in report*, page 24.

- Answered calls (answered personally by the user + forwarded by other users)

ⓘ For a call which has been forwarded to a user by another user two calls will appear in the report.

- Percentage of total of answered calls in the queue
- Missed calls

ⓘ The number of your own missed calls can be higher than the total number of missed calls. If a call is forwarded to a user more than once, e.g. one time automatically by system and one time by another user, each failed call delivery attempt is counted as a missed call of the respective user. For a queue a call is only counted as missed if the call is not answered by a user within the defined maximum waiting time for callers.

- Percentage of total missed calls in the queue
- Average talk time
- Relative percentage of total talk time in the queue

  Example 1:

  A queue has a total of 40 calls and an average talk time of 2:00 min.

  User A with an average talk time of 3:00 min has a value of +50% since 3:00 min are 1 min more than the total average of 2:00 min and 1 min is 50% of 2:00 min.

  User B with an average talk time of 1:30 min has a value of -25% since 1:30 min are 30 sec less than 2:00 min and 30 sec is 25% of 2:00 min.

  Example 2:

  A queue has a total of 8 calls.

  User A has 7 answered calls with an average talk time of 2:00 min.

  User B has 1 answered call with an average talk time of 10:00 min.

  The total average talk time in the queue is (7 x 2) + (1 x 10) = 24 / 8 = 3:00 min.

Answered calls, Missed calls and Average talk time

ⓘ The number of missed calls may differ between a queue and users. If a user does not answer a call, this is counted as a missed call for him. If another user in the queue then takes the call, it is counted as answered at the queue level.

	Queue	Users
Answered calls	Total of calls which have been answered by all users of the queue	Both, automatically forwarded calls and calls forwarded by other users, which have been answered by the user
Missed calls	• no user has answered the call within the defined maximum waiting time • the caller dropped the call before a user could answer the call	• the user has not answered the call within the defined time • the caller dropped the call before the user could answer the call
Average talk time	Average talk time of all users, calculated from the total talk time of all calls	Average talk time, calculated from all calls the user has answered, including calls forwarded by other users

4   Wallboards

Swyx VisualGroups wallboards enable real-time insights to queue statistics. You can create and edit various wallboards in the web portal. These allow you to visually merge multiple queues into one view.

⚠️   The Wallboard feature is only available with a valid VisualGroups Enhanced license.

4.1   Creating and editing wallboards

⚠️   VisualGroups Wallboards are supported with the browsers Google Chrome, Mozilla Firefox, Safari and Microsoft Edge 80.0.361.69 or higher.

1   Select **Administration | Wallboards** in the main menu of the web portal.
     ✓ The list of your VisualGroups wallboards appears with following information:

Column	Description
Wallboard name	Name of the wallboard
Language	Language of the wallboard
Layout	Light or dark mode
URL	The URL will redirect you to the wallboard.

2   Click on **Add**
     or
     activate the checkbox in the line of the of the corresponding wallboard and click on **Edit**.
3   You can define the following settings:

Parameter	Description
Name	Enter a name for the wallboard. The name is displayed in the web portal.
Display name	Enter the display name for the wallboard.
Type	Choose between two wallboard types from the dropdown list: ● Summary: Original wallboard ● List view: displays a list of multiple queues ● Userinfo: In addition to the overview, also provides a status overview of users in up to 4 queues and a favorites bar with up to 10 users. The colour coding of the users indicates the availability or call status. A teal marker shows a user that he/she will receive the next call in the queue.
(Dynamic colouring)	The values for the dynamic colouring are automatically filled in if there is another wallboard configuration where formula parameters were entered for that particular queue. You can overwrite these values by entering new ones. The values will only be applied to existing configured wallboards if you select the **Apply the parameters for this queue (%QUEUENAME%) to all configured wallboards**. If you create a second overview wallboard with the same queue, the values are not filled. The values for the color coding are only applied to the formula parameters of the list view.
Authorisation	You can enforce authorisation to view the wallboards. From the drop-down list, choose between **No authorization**, "(SwyxWare) users only" and "(SwyxWare) Administrators only".
Language	Select the language to be displayed on the wallboard.

Parameter	Description
Layout	Select the layout in which the wallboard is to be displayed.
Refresh in seconds	Enter the refresh time in seconds. The wallboard updates the data at this interval.

Parameter	Description
(Formula parameters)	The following formula parameters define when the label is displayed in red (Warning). The values for the orange and green labels are automatically calculated and displayed during the configuration. You can leave the fields for the formula parameters blank. If you do not enter a value, the input field remains grey and the dynamic colouring for the wallboard is not activated.
Waiting	The number of callers waiting in one or more queues.
Users busy	The number of users in the call.
Users available	The number of users that can currently accept a call.
Ø waitingtime	The average waiting time of a caller in seconds.
Service level	The percentage of answered calls.
Missed	The number of unanswered calls.

For examples and the calculation of threshold values see *Calculation of wallboard parameters and sample configurations.*, page 45.

4   If you have selected **Summary view** as the type, you can assign one or more queues to the wallboard by checking the box next to the desired available queues and clicking the appropriate arrow button. You can also assign the queues via drag and drop.

The assigned queues are displayed in the wallboard. If you select more than one queue, the statistics are summarized respectively added.

For an example wallboard **Summary** see 4.1.1.1 *Example view: Summary*, page 44.

5   If you have selected **List View** as the type, assign the queues by selecting the checkboxes next to the desired available queues and clicking the appropriate arrow button.
You can also assign queues via drag and drop.

Above the queue assignment you configure the color coding for the overview in the summary column; below for each assigned queue individually.

For an example wallboard **List** see 4.1.1.2 *Example view: List*, page 44.

6   If you have selected **Userinfo** as the type, assign up to four queues by selecting the checkboxes next to the desired available queues and clicking the appropriate arrow button. Below you can assign up to ten users for the favorites list in the upper part of the wallboard. You can also assign queues and users via drag and drop.

The color coding of the frame in the wallboard **Userinfo** is based on the SwyxIt! status of the users.

The red marking under the agent name marks the queue from which the user's current active call originates.

For an example wallboard **Userinfo** see 4.1.1.3 *Example view: Userinfo*, page 45.

7   Click on **Save**.
✓ The wallboard is saved and a URL is created in the overview. The URL will redirect you to the wallboard display.

4.1.1   Displaying a wallboard

1   Select **Administration | Wallboards** in the main menu of the web portal.
  ✓ The list of your VisualGroups wallboards appears.

2   Click on the URL in the line of the corresponding wallboard.
  ✓ You will be redirected to the wallboard.

3   If necessary log in with your SwyxWare account to view the wallboard.
  ✓ The wallboard automatically updates itself according to the specified refresh time.

> ℹ   A change to the wallboard configuration is automatically applied when viewing the wallboard. The previous URL is retained.

4.1.1.1   Example view: Summary
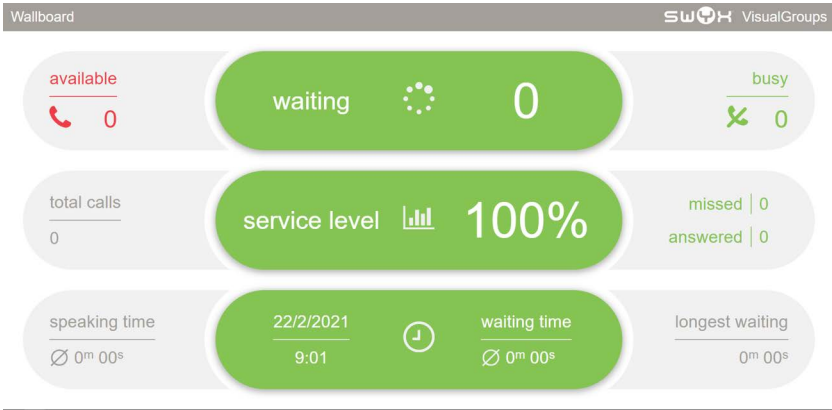
Fig. 4-1: Example wallboard summary view in light mode
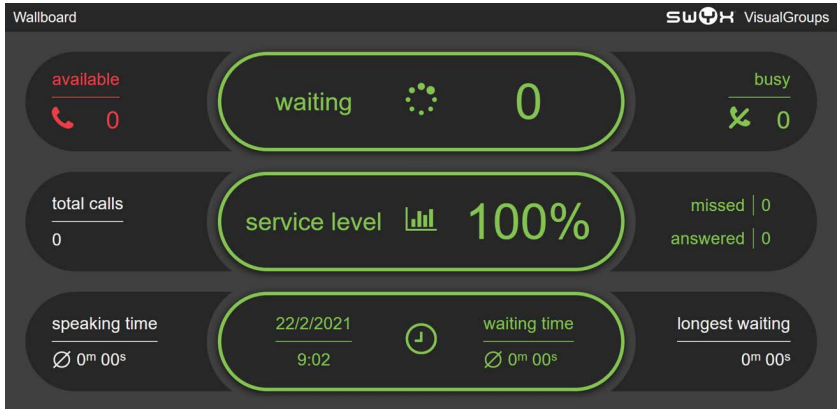
Fig. 4-2: Example wallboard summary view in dark mode

4.1.1.2   Example view: List

Fig. 4-3: Example wallboard list view in light mode

Fig. 4-4: Example wallboard list view in dark mode

ℹ️ If you have assigned more than four queues, the list view scrolls through all queues.

4.1.1.3   Example view: Userinfo

Fig. 4-5: Example wallboard userinfo in light mode

Fig. 4-6: Example wallboard userinfo in dark mode

4.1.2   Deleting a wallboard

1   Select **Administration | Wallboards** in the main menu of the web portal.
   ✓ The list of your VisualGroups wallboards appears.
2   Activate the checkbox in the line of the desired wallboard.
3   Click on **Delete**.

4.2   Calculation of wallboard parameters and sample configurations.

In this chapter the calculation formulas of the wallboard parameters (thresholds) are shown for the three categories **Normal**, **Warning** and **Fail**. Additionally you'll find three sample configurations for orientation and quick setup.

- **Example 1:** Average threshold, average number of users
- **Example 2:** Low threshold, low number of users
- **Example 3:** High threshold, higher number of users

Name	Calculation	Ex. 1	Ex. 2	Ex. 3
Waiting		X = 5	X = 2	X = 10
	Normal: <X*0,5 (rounded up)	< 3	< 1	< 5
	Warning threshold: >=X*0,5 (rounded up)	> = 3	> = 1	> = 5
	Fail threshold >=X	> = 5	> = 2	> = 10
Users busy		X = 80%	X = 50%	X = 90%
	Normal: <X-20 (Users busy/available*100%)	< 60%	< 30%	< 70%
	Warning threshold: >=X-20	> = 60%	> = 30%	> = 70%
	Fail threshold >=80	> = 80%	> = 50%	> = 90%
Users available		X = 0	X = 5	X = 10
	Normal: >=X*1,3 (rounded, min. 1 higher)	> 1	> 7	> 13
	Warning threshold: <=X*1,3 (rounded, min. 1 higher)	= 1	< = 7	< = 13
	Fail threshold <=X	= 0	< = 5	< = 10
Ø waitingtime		X = 40	X = 20	X = 120
	Normal: <=X*0,75 (rounded up, in sec.)	< 30	< 15	< 90
	Warning threshold: >=X*0,75 (rounded up, in sec.)	> = 30	> = 15	> = 90
	Fail threshold >=X (in sec.)	> = 40	> = 20	> = 120

Name	Calculation	Ex. 1	Ex. 2	Ex. 3
Service level		X = 80%	X = 90%	X = 70%
	Normal: >((100-X)/2)+X (rounded up))	> 90%	> 95%	> 85%
	Warning threshold: <=((100-X)/2)+X (rounded up)	< = 90%	< = 95%	< = 85%
	Fail threshold <=X	< = 80%	< = 90%	< = 70%
Missed		X = 5	X = 2	X = 10
	Normal: <X*0,5 (rounded up)	< 3	< 1	< 5
	Warning threshold: >=X*0,5 (rounded up)	> = 3	> = 1	> = 5
	Fail threshold >=X	> = 5	> = 2	> = 10

App. A: Appendix

A.1   Overview System
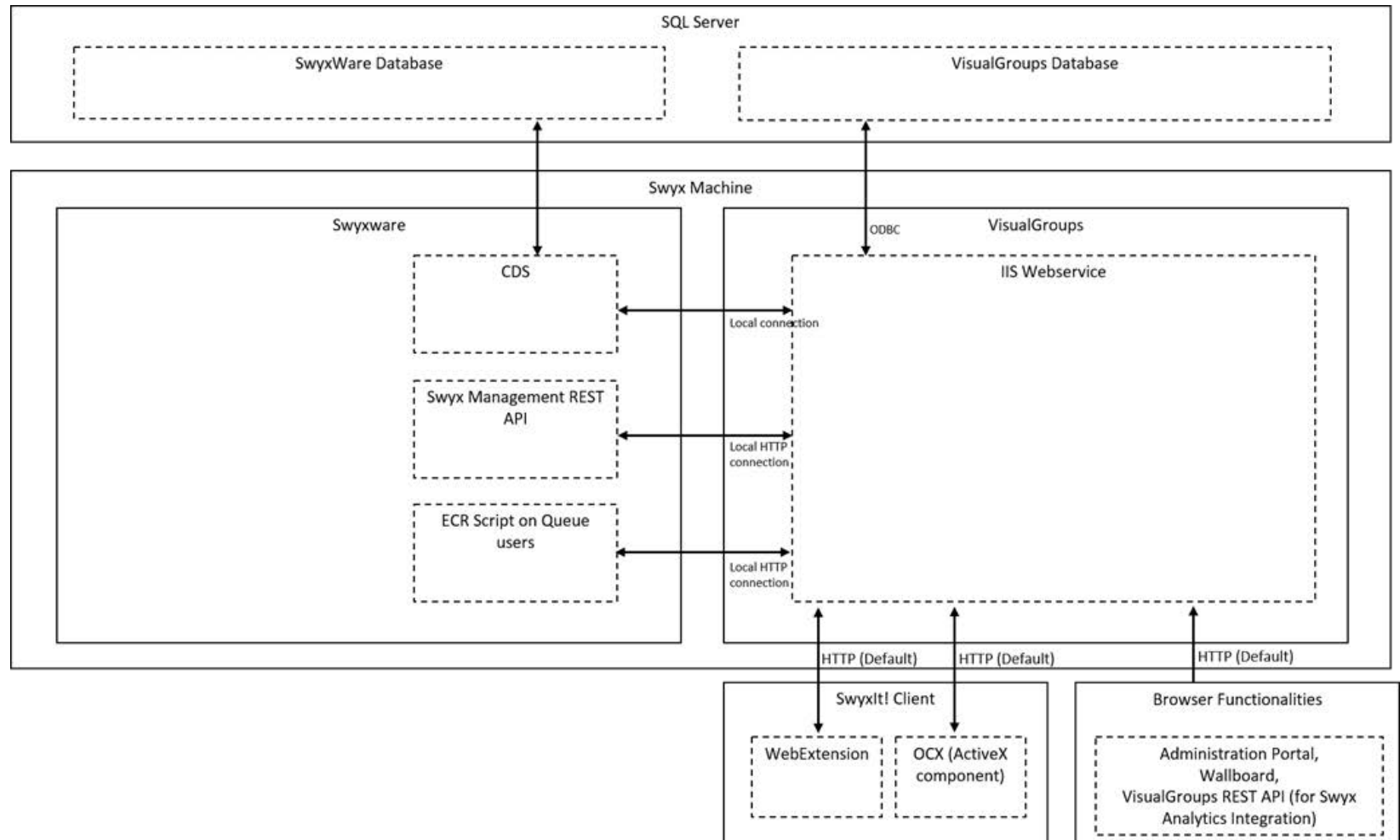
1. VisualGroups must be installed on the same system as SwyxWare. This is necessary because VisualGroups depends on the SwyxWare CDS service and connects locally. In addition, the ECR scripts connect locally (via HTTP) to VisualGroups' IIS Web service.

2. The VisualGroups database can be hosted as required. It does not need to be hosted on the same machine as SwyxWare.

3. If you are running the unattended installation mode, you can specify a database name that allows multiple VisualGroups instances on a single SQL server.

4. The data traffic from SwyxIt! as well as configuration pages or wallboards is primarily sent via HTTP.

5. You can make the Web service accessible over the public Internet. As the client interaction takes place over HTTP, you can configure SSL and a domain name on the IIS web service and, depending on the scenario, allow a connection from all or from specific IP addresses. Note, however, that the ECR scripts connect to localhost and therefore do not use the configured domain name. See "TLS/SSL Activation in VisualGroups", service.swyx.net/hc/en-gb/articles/360008304879-TLS-SSL-Activation-in-VisualGroups.

6. If you restrict the connection via Internet to certain IP addresses, users with other IP addresses (e. g. from home office or mobile) can connect to SwyxIt! via remote connection but cannot access the VisualGroups service.

A.2   Distribution of Calls according to Default extension

As of VisualGroups version 1.8.2240, the ECR script no longer routes calls to a user by the user's name, but by the user's default extension (if not disabled). Therefore, an external device must be connected to the default extension if the user wants to use it for VisualGroups.

Example:

A user has the extension 100 and is a VisualGroups user. He can therefore only be reached within VisualGroups via extension 100.

A: The number 100 is assigned with SwyxIt! A call to this number will be routed to the VisualGroups queue.

B: The number 101 is assigned to the user's desk phone for example. A call to this number will not be routed to the queue.