Configuring Z-Push Autodiscover

Z-Push AutoDiscover manual

This manual gives an introduction to the Z-Push AutoDiscover service, discusses technical details and explains the installation.

Introduction

AutoDiscover is the service used to simplify the configuration of collaboration accounts for clients, especially for mobile phones.

While in the past the user was required to enter the server name, user name and password manually into his mobile phone in order to connect, with AutoDiscover the user is only required to fill in his email address and the password.

AutoDiscover will try several methods to reach the correct server automatically.
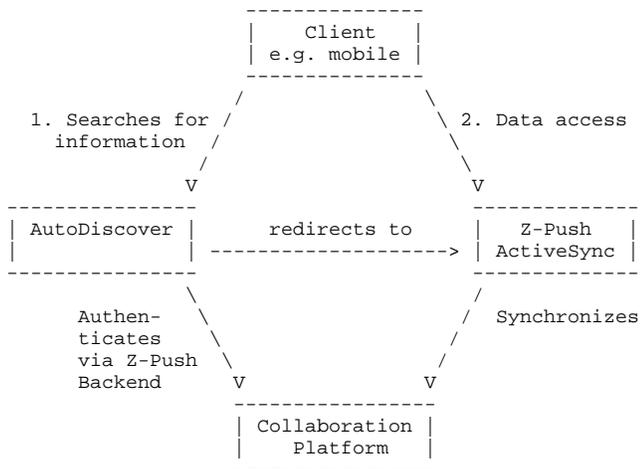
How does it work?

When speaking about AutoDiscover, this includes two distinct realms:

- AutoDiscover is a specification which defines the steps a client should take in order to contact a service to request additional data.
- The AutoDiscover service is piece of software which accepts requests from the clients, authenticates them, requests some additional data from the collaboration server and sends this data back to the client.

The specification suggests several ways for client to contact the responsible server to receive additional information. Tests have shown, that basically all mobile phones tested support only the most basic ways. These are sufficient for almost all types of scenarios and are the ones implemented by Z-Push AutoDiscover. Please refer to the Mobile Compatibility List (http://z-push.org/compatibility) for an overview of supported and tested devices.

The used email address is the key for the process. The client splits it up into the local and domain part (before and after the @-sign). The client then tries to connect to this domain in order to get in contact with the AutoDiscover service. The local part of the email address is used as "login" to the AutoDiscover service. There is also an option, to use the full email address as login name (see "Configuration" section below for details).

```
                    ---------------
                   |    Client     |
                   |  e.g. mobile  |
                    ---------------
                    /             \
   1. Searches for /               \ 2. Data access
      information /                 \
                 /                   \
                V                     V
   ---------------                     --------------
  | AutoDiscover |     redirects to   |   Z-Push     |
  |              | ------------------>| ActiveSync   |
   ---------------                     --------------
            \                           /
    Authen-  \                         /  Synchronizes
    ticates   \                       /
    via Z-Push \                     /
    Backend     V                   V
            ----------------
           | Collaboration |
           |    Platform   |
            ----------------
```

Requirements

As described in the previous chapter, the local part of the email address or the email address is used in order to log in.

Your configuration requires that this type of login is possible:

- either the user name is used to login and must be used in the email address entered on the mobile, or
- the entire email address is used to login.

Which option is used has to be configured in the AutoDiscover configuration and in the underlying platform (e.g. KC (hosting mode)).

Most companies use the user name as local part of the email by default. From the AutoDiscover point of view, it is not required that user is able to receive emails at the used email address. It is recommended allowing that in order not to confuse end users.

AutoDiscover also requires a valid SSL certificate to work as expected. A very little percentage of mobiles support self-signed certificates (showing a pop-up alerting the user). Most mobiles silently ignore self-signed certificates and just declare the AutoDiscover process as failed in such cases. If AutoDiscover fails, the user is generally redirected to the "manual configuration" of the client.

If you do not plan to acquire an official certificate, you will probably not be able to use the AutoDiscover service.

Depending on your setup, it could be necessary to add new DNS entries for your mail domain.

Domain setup

There are two general ways the AutoDiscover process can be configured:

1. Directly with "yourdomain.com" website ("www.yourdomain.com" will most probably not work)

2. With the sub-domain "autodiscover.yourdomain.com"

In both cases, an official SSL certificate is required. If you already have a certificate for your domain, the webserver answering for that domain could be reconfigured to allow AutoDiscover requests as well. In the case that you do not have direct access to this type of configuration (e.g. hosting provider), it's recommended to acquire a dedicated certificate for "autodiscover.yourdomain.com". Please note, that this sub-domain can NOT be renamed. In general, "wildcard" certificates can be used, as long they are valid for the required domain.

Software requirements

Like Z-Push, AutoDiscover is written in PHP, where PHP 5.1 or newer is required. Please consult the Z-Push INSTALL file for further information about PHP versions. If only AutoDiscover is to be executed on a host, the Z-Push PHP dependencies do NOT need to be installed.

AutoDiscover has one direct dependency, the php-xml parser library. These packages vary in names between the distributions.

- Generally install the packages: php-xml
- On Suse (SLES & OpenSuse) install the packages: php53-xml
- On RHEL based systems install the package: php-xml

Installation

AutoDiscover is part of the Z-Push package and uses some of the functionality available in Z-Push.

It is possible to install AutoDiscover on the same host as Z-Push, or to install them on different hosts.

Currently, independently from the setup, it's recommended to install Z-Push Autodiscover from packages. See Installation on this.

Please follow the install instructions from the Z-Push INSTALL file (section "How to install") to copy the files to your server.

If you do not want to setup Z-Push on the host, do not add the "Alias" for ActiveSync.

To setup the SSL certificate, please refer to one of the many setup guides available on the internet, like that one: http://www.apache.com/resources/how-to-setup-an-ssl-certificate-on-apache/

The mobiles requests these URLs (where "yourdomain.com" corresponds to the domain part of the email used in the client):

https://yourdomain.com/Autodiscover/Autodiscover.xml and/or

https://autodiscover.yourdomain.com/Autodiscover/Autodiscover.xml

Add the following line to the apache site configuration file.

```
AliasMatch (?i)/Autodiscover/Autodiscover.xml "/usr/share/z-push/autodiscover/autodiscover.php"
```

This line assumes that Z-Push is installed in /usr/share/z-push. If the path is different, please adjust it accordingly.

Note: some mobiles use different casings, like "AutoDiscover" in the URL. The above statement is valid for these as well.

Please restart Apache afterwards.

Configuration

There are several parameters in the configuration file, which allow to customize the behaviour of the AutoDiscover Service.

The configuration, generally is located in the z-push/autodiscover directory and is called "config.php".

The parameters:

BASE_PATH	This property specifies where the AutoDiscover files are located. Normally there is no need to adjust this parameter.
ZPUSH_HOST	Optional config option to influence the address to Autodiscover code sends to the device. If not set the code will redirect to the value obtained from HTTP_HOST or SERVER_NAME (introduced in 2.3.4, replaces SERVERURL)
USE_FULLEMAIL _FOR_LOGIN	If this is set to "true", AutoDiscover will attempt to login on the collaboration server with the full email address sent by the client. If disabled (default), the local part of the email address is used.
AUTODISCOVER _LOGIN_TYPE	If the local part of the email address doesn't match the user name, this parameter helps to convert it for some common cases. Possible values: AUTODISCOVER_LOGIN_EMAIL - uses the local part of the email address as provided when setting up the account. AUTODISCOVER_LOGIN_NO_DOT - removes the '.' from email address: email: first.last@domain.com -> resulting username: firstlast AUTODISCOVER_LOGIN_F_NO_DOT_LAST - cuts the first part before '.' after the first letter and removes the '.' from email address: email: first.last@domain.com -> resulting username: flast AUTODISCOVER_LOGIN_F_DOT_LAST - cuts the part before '.' after the first letter and leaves the part after '.' as is: email: first.last@domain.com -> resulting username: f.last
LOGFILEDIR	The directory where logfiles are created.
LOGFILE	The default AutoDiscover log file.
LOGERRORFILE	The default AutoDiscover error log file.
LOGLEVEL	The loglevel, set it to WBXML to see the data received and sent from/to clients.
LOGAUTHFAIL	Set to true, to explicitly log failed login attempts.
BACKEND_PROV IDER	The backend to be used. If empty (default) the code will auto detect which backend to use. Please note: the desired backend also needs to be configured, in the "backends/<backend>/config.php" file.

Test installation

If everything is correct, accessing with a browser the URL for your setup, you should see:

1. a pop-up asking for your username + password. Always use the email address which you would also enter on the mobile (independently from the configuration).
2. if the authentication was successful, you will see a Z-Push informational page (like when accessing the Z-Push location).

Note: The same test can also be performed in the mobiles web browser to check if the access works correctly from the mobile network.

If the authentication fails, please check the configuration options of AutoDiscover. Also check the logfiles for possible failures.

If the manual method works, try setting up your mobile phone! :)