WYDE Software Installation Guide

(version 2.1)

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For the most current versions of documentation, go to the WYDE support Web site:
http://www.wydevoice.com/support

July 30, 2010

Symbols and Notations in this Manual

The following notations and symbols can be found in this manual.

Denotes any item that requires special attention or care. Damage to the equipment or the operator may result from failure to take note of the noted instructions

Figure Denotes any illustration

Table Denotes any table

`Text` Denotes any text output

Folder/File Denotes any folders (paths) or files names

`commands` Denotes any commands, attributes and parameters

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Chapter 1: Introduction

The installation package for WYDE Voice conferencing bridge software is distributed as DVD disk. Installation media (DVD) contains all necessary files to install WYDE Voice conferencing bridge software. Installation DVD also contains any additional components required for the installation, thereby internet connection is not required for the installation. However internet connection is recommended; while installing WYDE software installer can download the latest version of prerequisite components from official CentOS repository.

Storing the Installation Files

We recommend in any case that you make and keep copies of the \installation DVD contents on your PC's local hard drive − preferably in a dedicated "installer folder" − and that you use these local files when installing. This will ensure immediate access to the installation files in case of subsequent installation upgrades or set-up changes.

Downloading the Installation Files from Internet

The installation files also can be downloaded from Internet using your FTP username and password. You can create the installation folder on your PC's local hard drive, go to this installation folder, and download the files from FTP using `wget` command:

```
wget -r ftp://YourFtpUsername:YourFtpPassword$123-
@ftp.wydevoice.com/releases/2.1.9-CENTOS5
```

Use your username and password instead of shown in the sample. See Figure 1 for details.

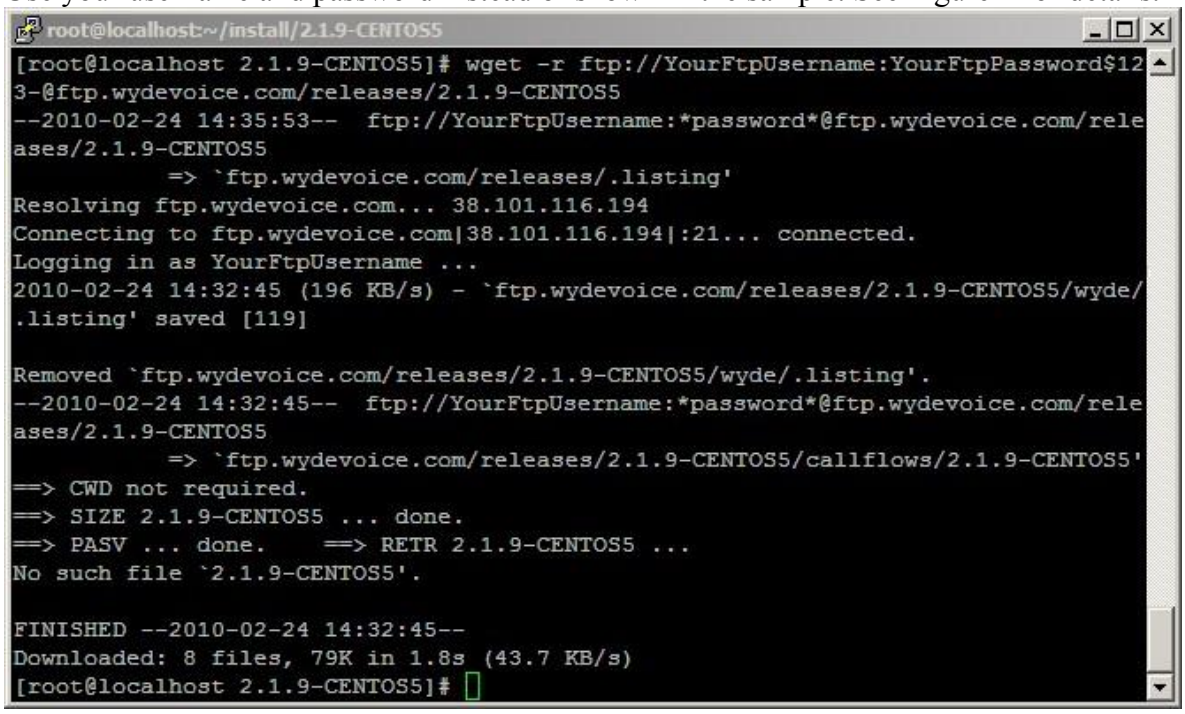

Figure 1: Downloading the Installation Files from Internet

This sample and screenshot show download process of the WYDE Voice conferencing bridge software version 2.1.9 for CentOS 5. The actual version may be different for you.

Permissions

You must have administrator (root) permissions to install the WYDE conferencing bridge software.

Domain Name System (DNS)

The computer where you are installing the WYDE conferencing bridge software must have DNS configured to resolve `` `hostname` `` to real computer IP address (not to *127.0.0.1*); i.e. `ping` `` `hostname` `` must return real computer IP address (such as *192.168.1.5*).
In the simplest case you may need to edit */etc/hosts* file. Read Linux and/or CentOS documentation if you need information how to configure DNS.

System Requirements

Please note that the following is required to run WYDE conferencing bridge software:

- **Operating system** – CentOS 5 (32-bit), minimum configuration, no additional components installed
- **Ethernet (network) adapter**
- **DVD/CD-ROM drive** – to access the installation files
- **CPU** – Intel® Xeon® X5550 or later
- **RAM** – 4GB RAM
- **HDD space** – 20GB minimum available

This configuration is recommended for 1000 simultaneous calls using default CONF call flow. Please contact WYDE Voice technical support to find which configuration is right for you.

In addition please make sure that the mail server is configured and started (you may need to run: "`service sendmail start`" for these purposes). This is needed to send notification emails (for example about any system crashes or reporting) within the WYDE conferencing bridge software.

Chapter 2: Software Installation

The WYDE conferencing bridge software consists of the following components:

- core components – *dnca* database, *mp* and *mf* services;
- front-end components – Asterisk service, *WYDE* and *WYDE-asterisk* packages;
- back-end components – Media Processor (mpw) service, *WYDE* and *WYDE-mpw* packages;
- web components – Web Services, Web Administration Interface, etc., *WYDE*, *WYDE-webapp*, *WYDE-webapp_wyde* packages;
- web extra components – Flash version of Web Control Console (WCC), *WYDE*, *WYDE-storage*, *WYDE-supportmodule*, *WYDE-wydevoice* packages.

There are two possible approaches to install WYDE conferencing bridge software:

- install all components of the product on one single computer – to do that in the installation program you should select (check) all WYDE software components and install them on single computer, see Figure 3;
- perform distributed installation and install the WYDE components on different computers, in this case
    - core components (*dnca* database, *mp* and *mf* services) are being installed on separate Linux cluster computers – one Linux computer or two Linux computers that are joined together in the cluster, *CORE* installation option is being used to do that;
    - front-end components (*asterisk* service) are being installed on separate computers (one or many), *FRONEND* installation option is being used to do that;
    - back-end components (Media Processor – *mpw* service) are being installed on another separate computers (one or many), *BACKEND* installation option is being used to do that;
    - web components of the WYDE software (Web Services, Web Administration Interface, etc.) are being installed on another computer; WEB installation option is being used to do that;
    - web Flash extra components of the WYDE software (Web Control Console) are being installed on another computer; WEB-FLASH installation option is being used to do that.

Note that you can combine and install some set of the components on one computer, and some on another, i.e. you can check and select any options to install them on the single computer.

Let's assume that you have copied the contents of the installation DVD disk to the */root/install/2.1.9-CENTOS5/* folder prior to the installation. To start WYDE conferencing bridge software installation you should perform the following steps:

1. Go to the installation folder of the software, for instance, type:
   `cd /root/install/2.1.9-CENTOS5/`
   if you have copied installation files into this folder.
2. Type `./setup.sh` to start the installation process.

3. The screen bellow shown on Figure 2 will appear next.

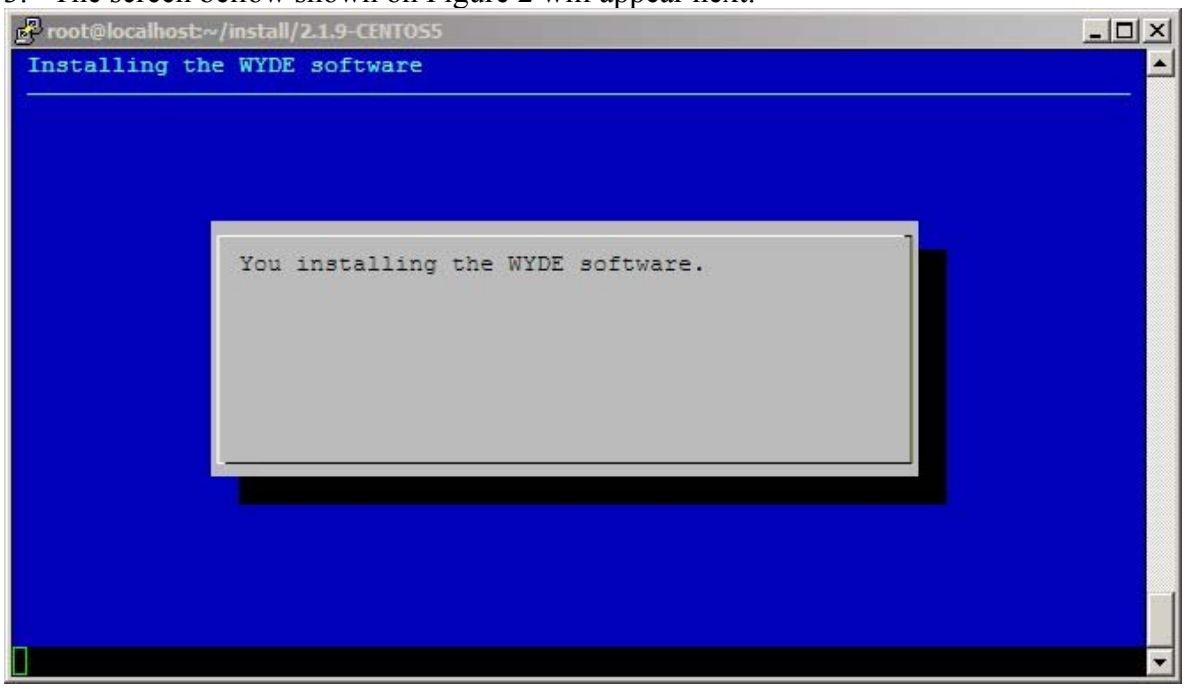

Figure 2: Installation Progress Screen

4. Select the WYDE components to install question will appear next, see Figure 3.

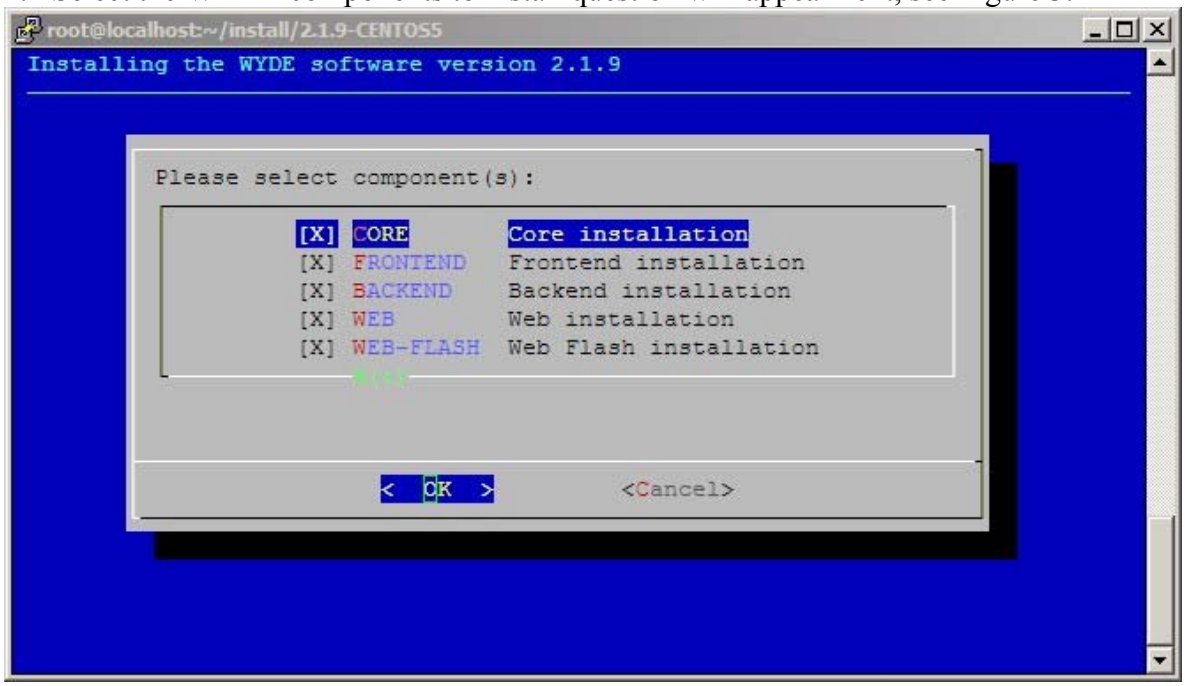

Figure 3: Installation "select components" Question

To perform full installation of all components on one single computer you should select all components on this screen as shown on the figure above. Otherwise if you would like to perform distributed installation and install any WYDE component on separate computer, you should select (check) this component only and unselect (uncheck) all

other components. Note that by default core, frontend, backend, web components are checked, but web flash component is unchecked.

2.1: Full Installation

The WYDE conferencing bridge software contains the following packages:

- WYDE-2.1.mm-n
- WYDE-agiserver-2.1.mm-n
- WYDE-asd-2.1.mm-n
- WYDE-asterisk-2.1.mm-n
- WYDE-asterisk-perl-2.1.mm-n
- WYDE-core_callflow-2.1.mm-n
- WYDE-mf-2.1.mm-n
- WYDE-mps-2.1.mm-n
- WYDE-mpw-2.1.mm-n
- WYDE-transcoder-2.1.mm-n
- WYDE-webapp_wyde-2.1.mm-n
- WYDE-webapp-2.1.mm-n

The following call flows packages are being installed in the installation:

- WYDE-conf_callflow-2.1.mm-n
- WYDE-operator_callflow-2.1.mm-n
- WYDE-playback_callflow-2.1.mm-n
- WYDE-spectel_callflow-2.1.mm-n

The following extra flash components packages are being installed in the installation:

- WYDE-storage-2.1.xx-y
- WYDE-supportmodule-2.1.xx-y
- WYDE-wydevoice-2.1.xx-y

The following services are being installed during full installation:

- postgresql
- tomcat
- agiserver
- sipserv
- mps
- mpw
- asterisk
- mf
- asd

To perform the full installation of the WYDE conferencing bridge software on a single computer you should start the installation as it was described in the beginning of this chapter and perform the steps from 1 till 4. After that the following steps should be implemented:

5. In the select installation components question to perform full installation on the single computer you should select all components as shown on Figure 3. All selected components (core, frontend, backend, and web) will be installed in this case.

6. Next the installation program will ask to enter (confirm) your host IP, see Figure 4.

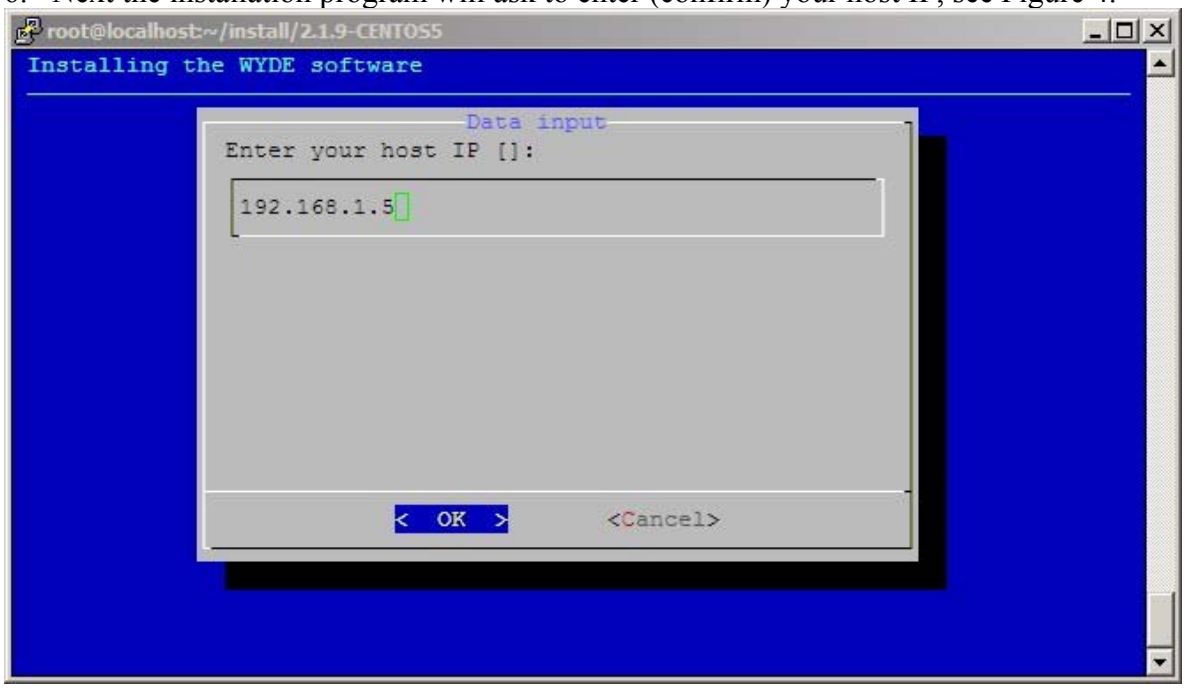

Figure 4: Full Installation "enter host IP" Question

7. Next the installation program will ask to enter the email address for notifications about any crashes as shown on Figure 5.

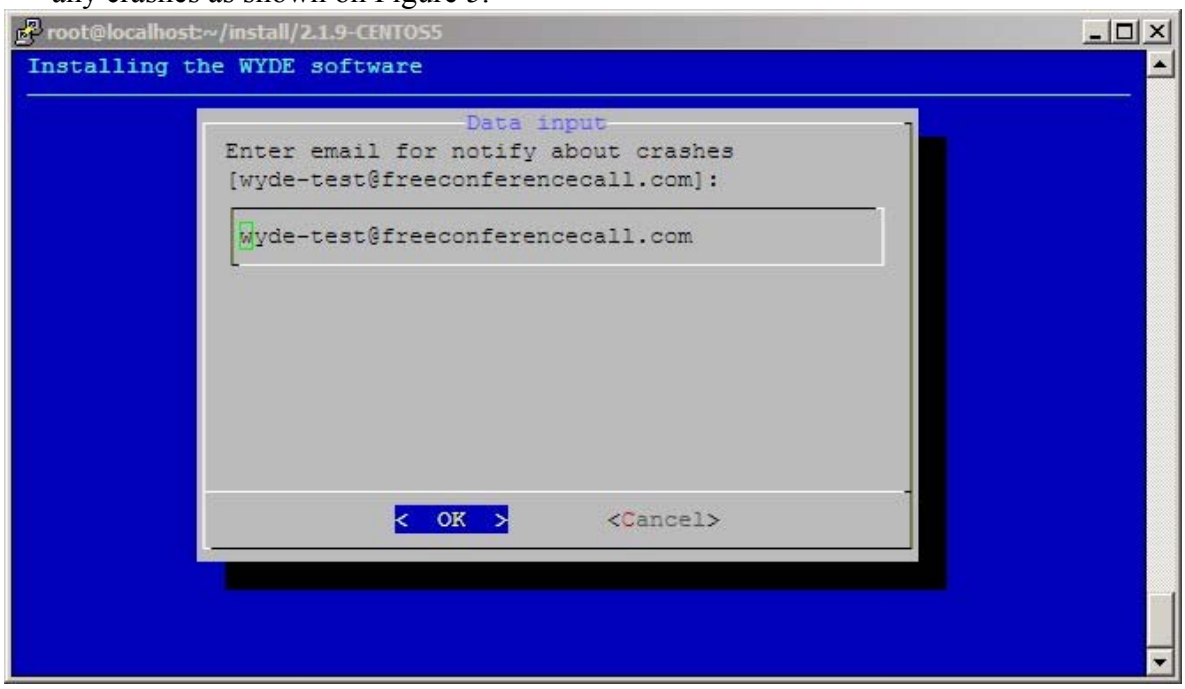

Figure 5: Full Installation "notification email" Question

8. When the installation process is completed the screen similar to shown on Figure 6 will appear.

Figure 6: Full Installation Completed Screen

This screen informs you what additional changes you have to make to use installed Flash component. You should perform the following steps:

i) Register conference DNIS number (call flow: SPECTEL); in this call flow set "*Realtime protocol*" attribute value equal "`on`", "*Callers database*" attribute value equal "`on`", and "*Playback number*" attribute value equal to playback conference DNIS number;
ii) Register playback conference DNIS number (call flow: PLAYBACK) and in this call flow set "*Reffered DNIS number*" attribute value equal to the DNIS number registered in the previous step;
iii) Update the configuration file *supportmodule.properties*
in folder: */opt/tomcat/webapps/supportmodule/WEB-INF/classes*
The following parameters should be changed:
`conferencePN` – should be equal to number registered in the step *i)*;
`playbackPN` – should be equal to number registered in the step *ii)*.

After this configuration has made you should restart *tomcat* service using the command:
`service tomcat restart`

When the WYDE conferencing bridge software installation is completed the installation folder (*/root/install/2.1.9-CENTOS5/* in our sample) will contain the following files: *install_error.log*, *install_frontend_error.log*, *install_backend_error.log*, *install_web_error.log*, *install_extra_error.log*. If there were not errors during installation these files should be empty, otherwise they contain the errors occurred during installation.

You can check the installed core packages using the command:
`rpm -qa | grep WYDE`
It should return the screen similar to shown on Figure 7.

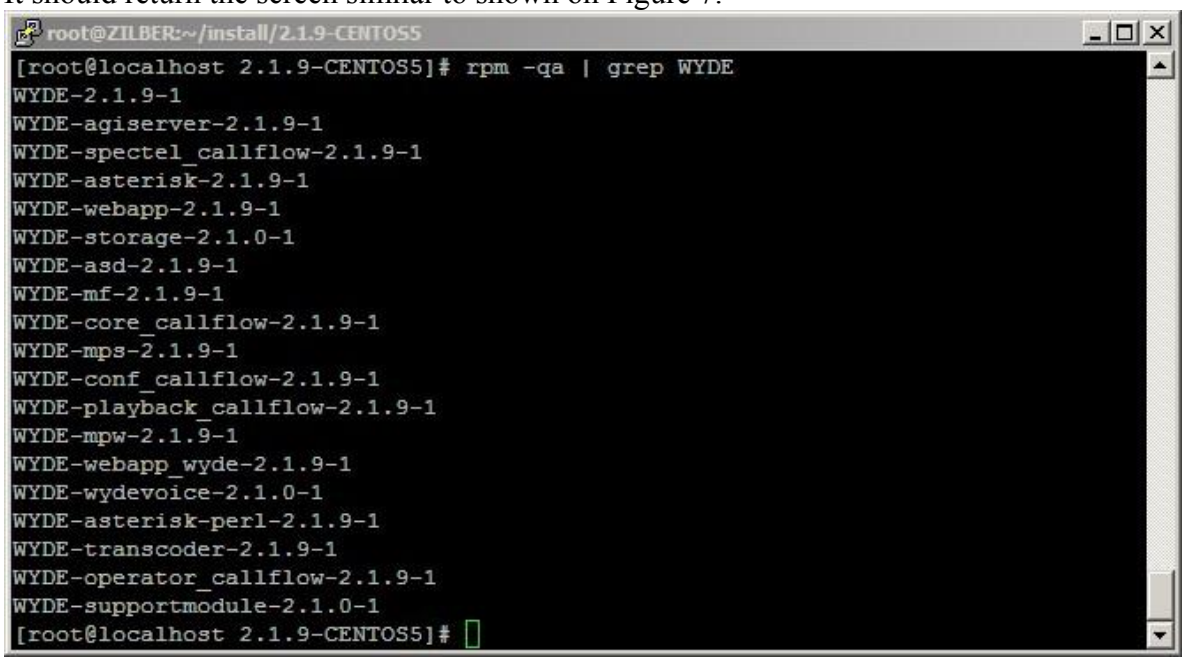

Figure 7: The WYDE Conferencing Bridge Software Installed Packages

After full installation completed you should start *postgresql*, *tomcat*, *agiserver*, *sipserv*, *mps*, *mpw*, *asterisk*, *mf*, and *asd* services using the following commands:

```
service postgresql start
service tomcat start
service agiserver start
service sipserv start
service mps start
service mpw start
service asterisk start
service mf start
service asd start
```

Or for the same purposes you can use the command:

```
service wyde start
```

After that you will see the screen similar to shown on Figure 8.

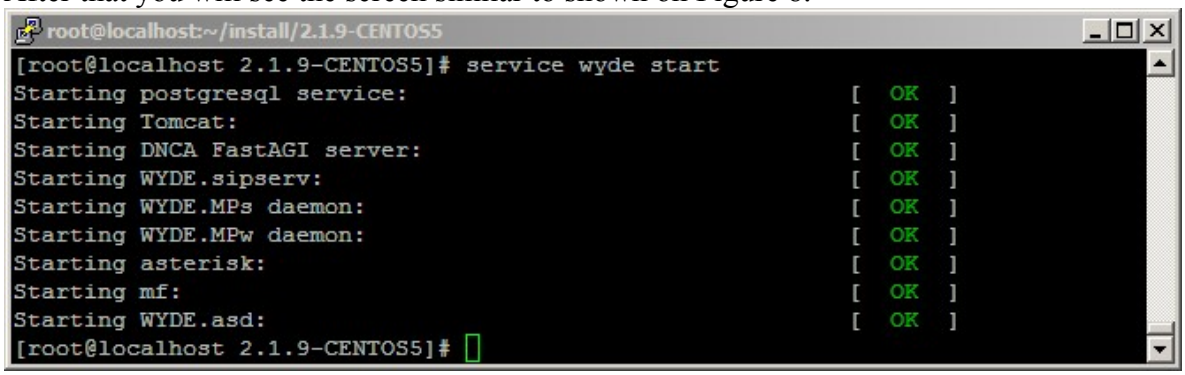

Figure 8: Starting All WYDE Services after Full Installation Completed

Note these WYDE services are being started automatically once your computer restarted.

After full installation the bridge can process 10 simultaneous calls only. To increase this amount you should visit http://licserver.wydevoice.com using your credentials and the unique hardware signature (*/usr/local/DNCA/etc/hws.bin*) which was built during the installation. See Chapter 3: Licensing of this guide for detail information.

Once you have installed the WYDE conferencing bridge software you can make the calls on the bridge on this computer. See Chapter 4: Verify Software Installation for details how to test the WYDE conferencing bridge software installation.

2.2: Core Installation

Core components contain the following packages:

- WYDE-2.1.mm-n
- WYDE-agiserver-2.1.mm-n
- WYDE-asd-2.1.mm-n
- WYDE-asterisk-perl-2.1.mm-n
- WYDE-core_callflow-2.1.mm-n
- WYDE-mf-2.1.mm-n
- WYDE-mps-2.1.mm-n

- WYDE-transcoder-2.1.mm-n

The following call flows packages are being installed in the core components installation:

- WYDE-conf_callflow-2.1.mm-n
- WYDE-operator_callflow-2.1.mm-n
- WYDE-playback_callflow-2.1.mm-n
- WYDE-spectel_callflow-2.1.mm-n

The following services are being installed during core installation:

- postgresql
- agiserver
- sipserv
- mps
- mf
- asd

To install WYDE conferencing bridge software core components on separate computer you should start the installation as it was described in the beginning of this chapter and perform the steps from 1 till 4. After that the following steps should be implemented:

5. In the select installation components question to perform frontend components installation on the separate computer you should select CORE component only and unselect all other components, see Figure 9.

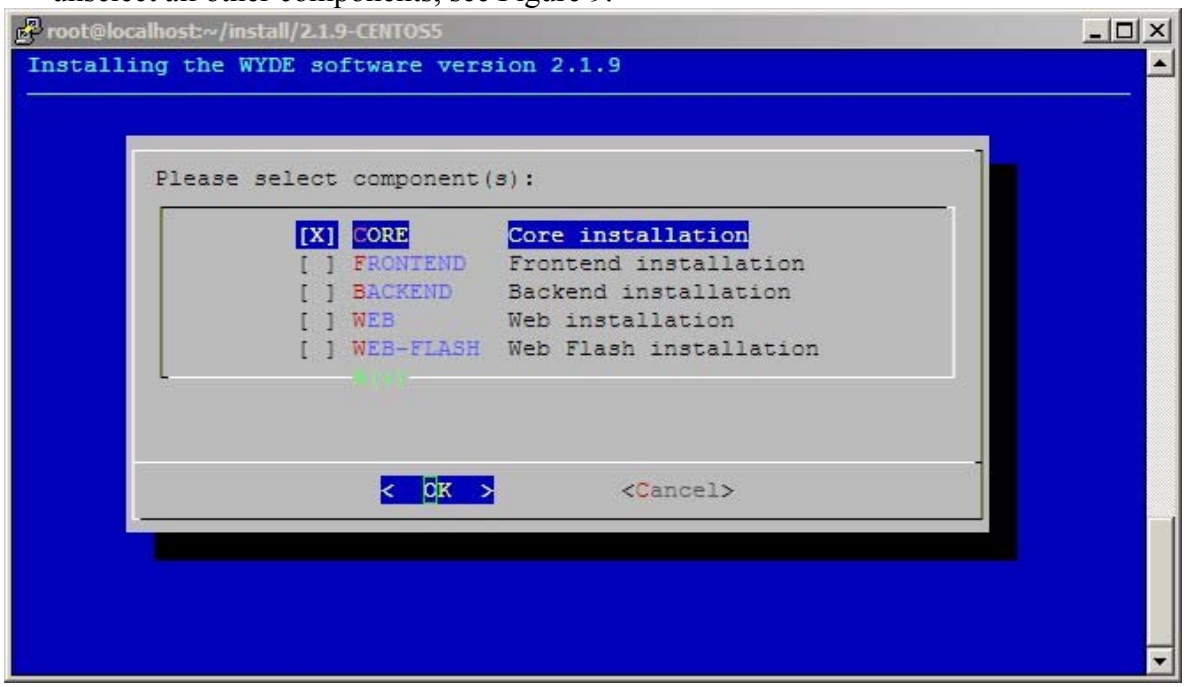

Figure 9: Installation "select components" Question, Core Installation Selected

6. Next the installation program will ask to enter (confirm) your host IP, see Figure 10.

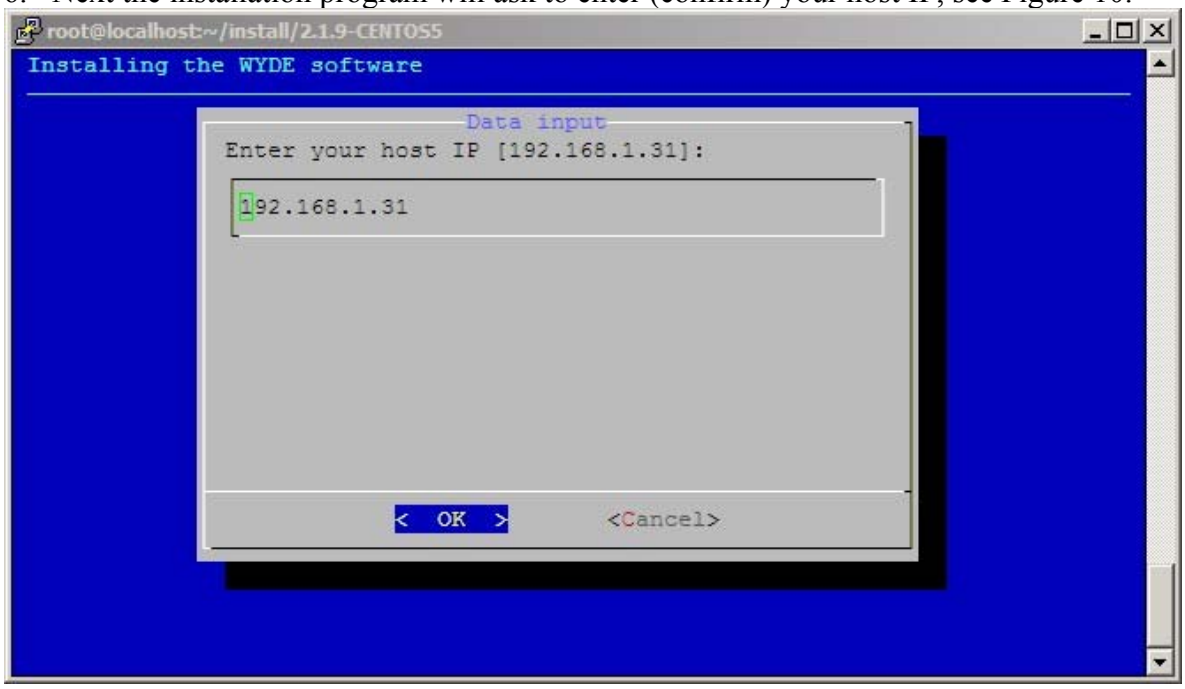

Figure 10: Core Installation "enter host IP" Question

7. Next the installation program will ask to enter the email address for notifications about any crashes as shown on Figure 11.

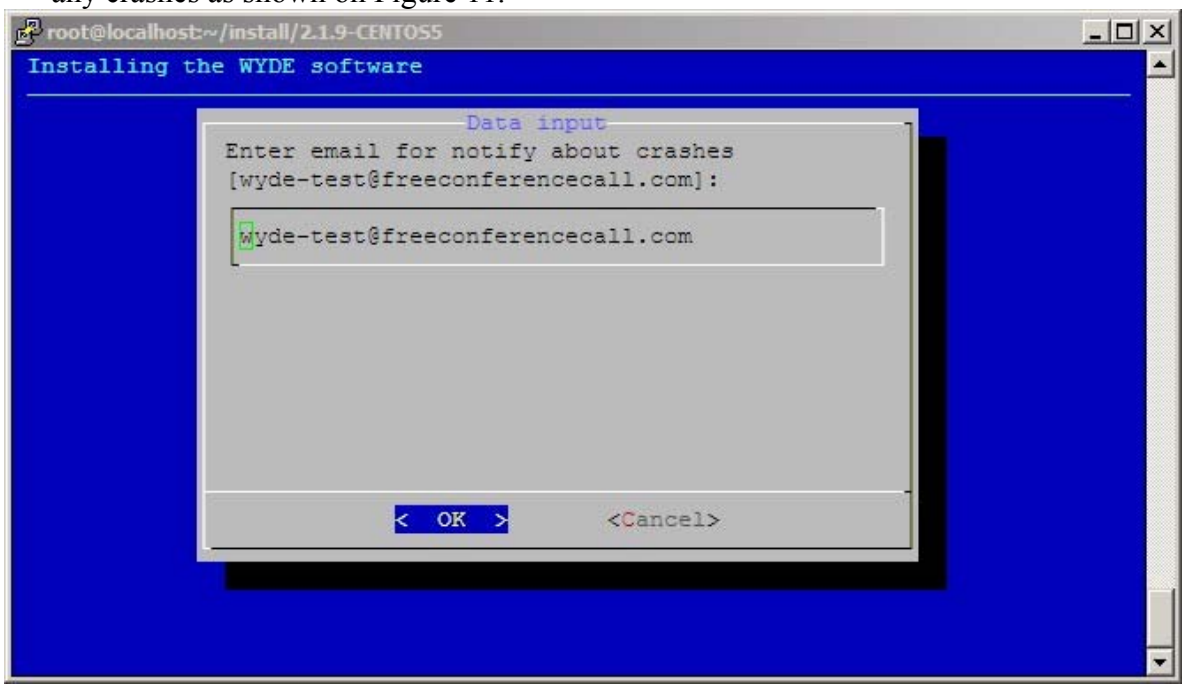

Figure 11: Core Installation "notification email" Question

8. After core installation has been completed you will see the screen similar to shown on Figure 12.

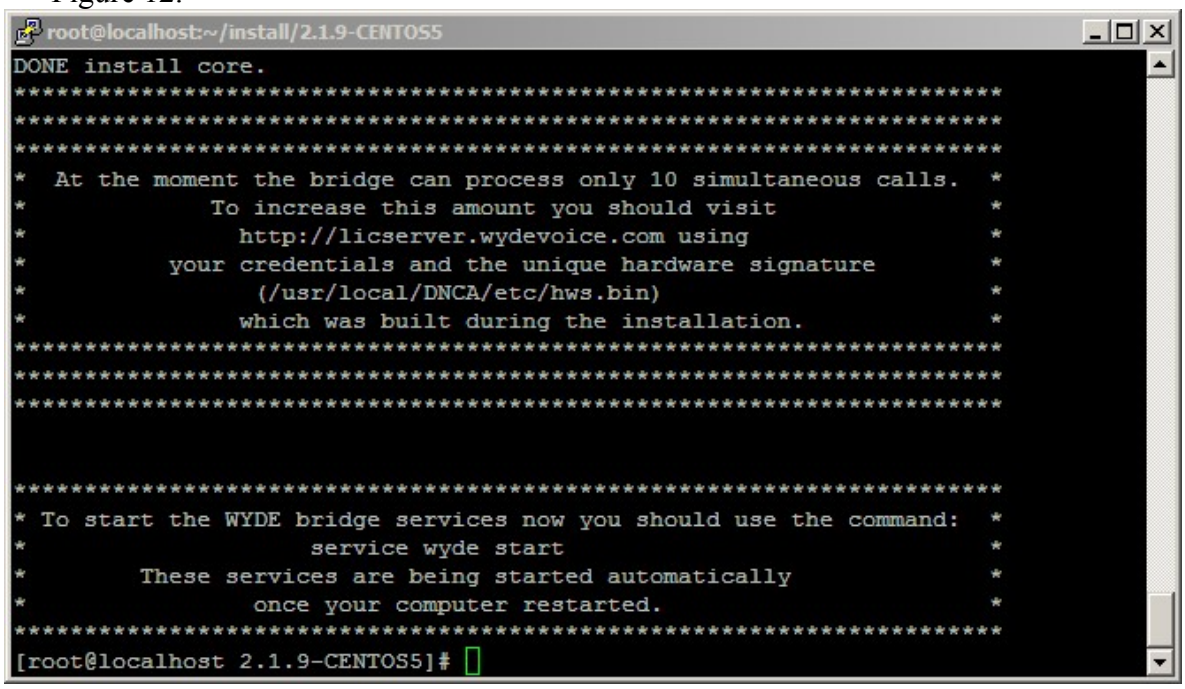

Figure 12: Core Installation Completed Screen

You can check the installed core packages using the command:

```
rpm -qa | grep WYDE
```

It should return the screen similar to shown on Figure 13.

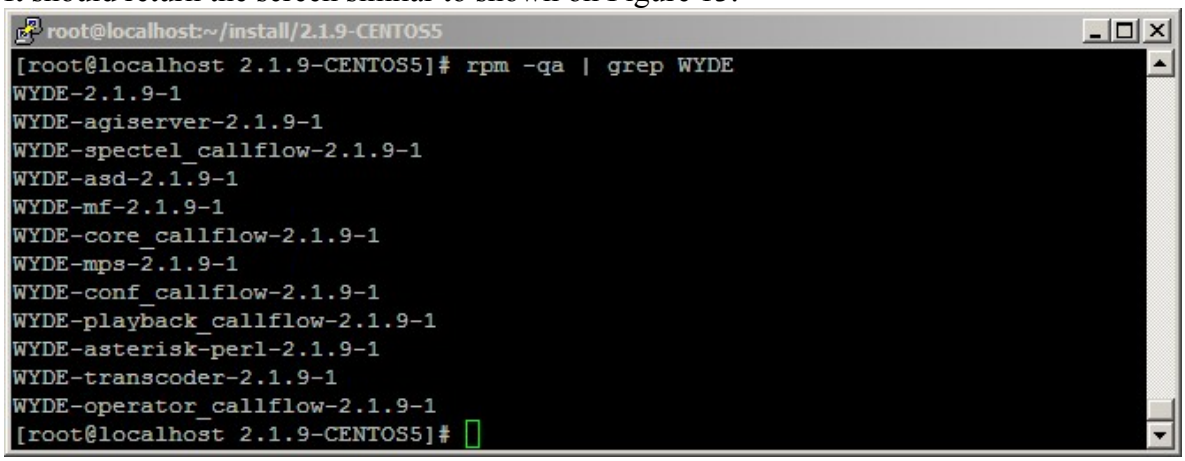

Figure 13: Core Installed Packages

After core installation completed you should start *postgresql*, *agiserver*, *sipserv*, *mps*, *mf*, and *asd* services using the following commands:

```
service postgresql start
service agiserver start
service sipserv start
service mps start
service mf start
service asd start
```

Or for the same purposes you can use the command:

```
service wyde start
```

After that you will see the screen similar to shown on Figure 14.

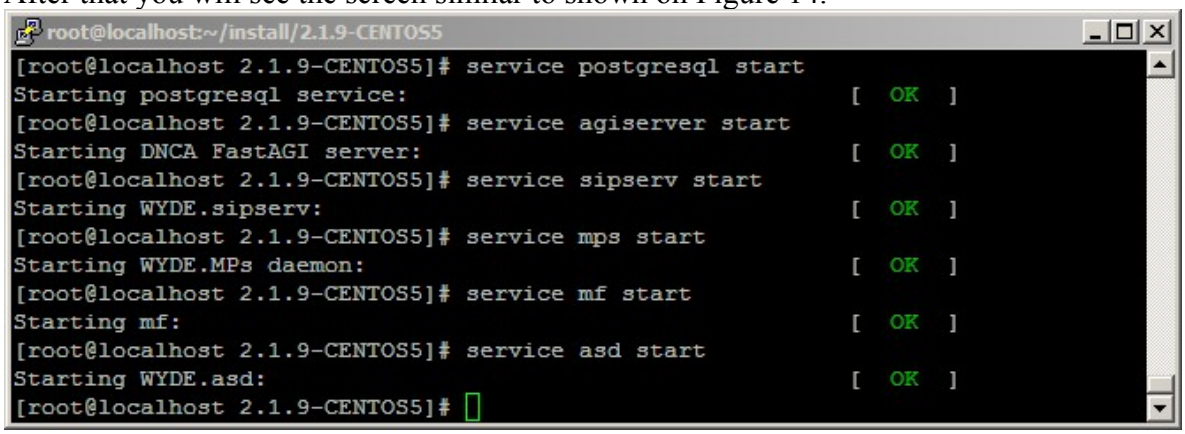

Figure 14: Starting *postgresql*, *agiserver*, *sipserv*, *mps*, *mf*, and *asd* Services after Core Installation Completed

Note these services are being started automatically once your computer restarted.

After core components installation the bridge can process 10 simultaneous calls only. To increase this amount you should visit http://licserver.wydevoice.com using your credentials and the unique hardware signature (*/usr/local/DNCA/etc/hws.bin*) which was built during the installation. See Chapter 3: Licensing of this guide for detail information.

Once you have installed the core components and all other necessary components you can make the calls on the bridge on this computer. See Chapter 4: Verify Software Installation for details how to test the WYDE conferencing bridge software installation.

2.3: Frontend Installation

Frontend components contain the following packages:

- WYDE-2.1.mm-n
- WYDE-asterisk-2.1.mm-n

The *asterisk* service is being installed during frontend installation.

To install WYDE conferencing bridge software frontend components on separate computer you should start the installation as it was described in the beginning of this chapter and perform the steps from 1 till 4. After that the following steps should be implemented:

5. In the select installation components question to perform frontend components installation on the separate computer you should select FRONTEND component only and unselect all other components, see Figure 15.

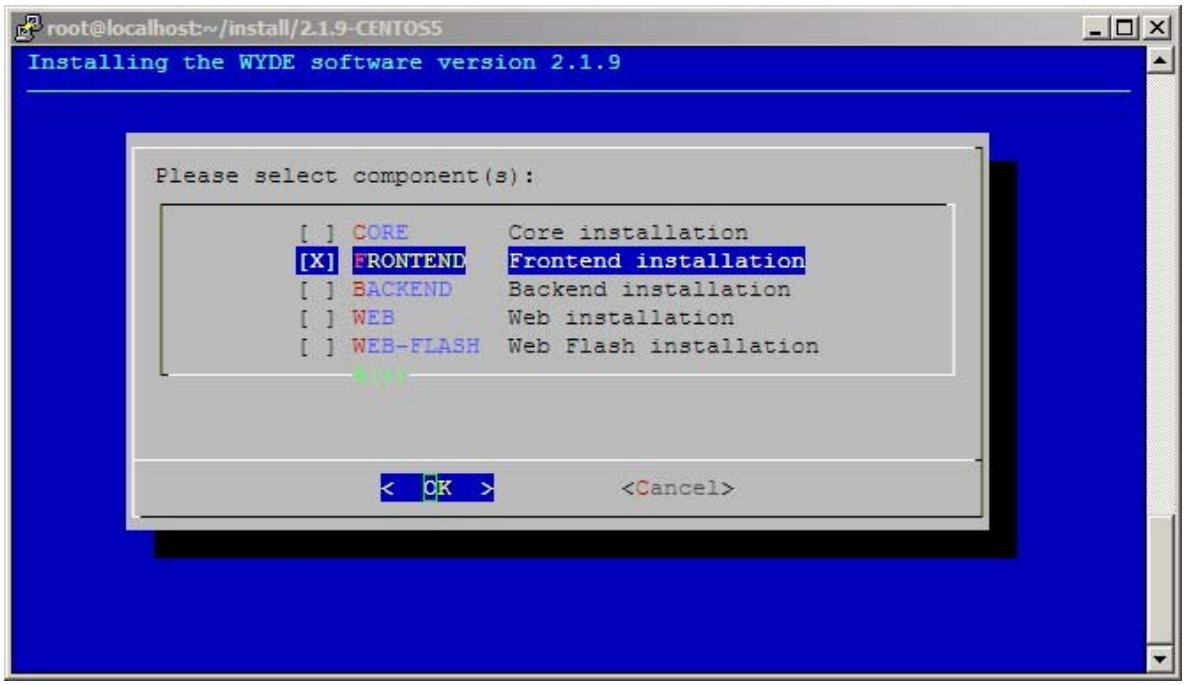

Figure 15: Installation "select components" Question, Frontend Installation Selected

6. After frontend installation has been completed you will see the screen similar to shown on Figure 16.

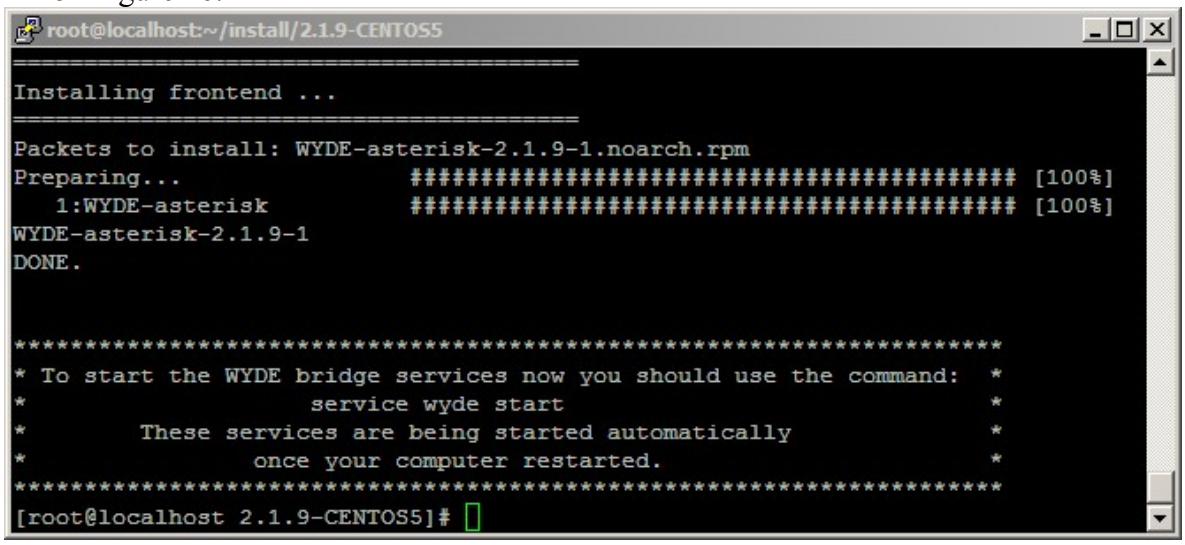

Figure 16: Frontend Installation Completed Screen

You can check the installed frontend packages using the command:
`rpm -qa | grep WYDE`
It should return the screen similar to shown on Figure 17.

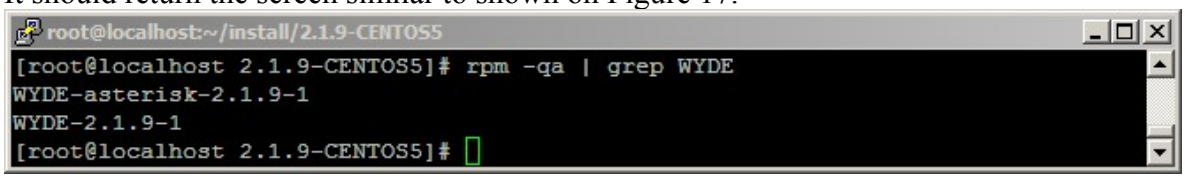

Figure 17: Frontend Installed Packages

After frontend installation complete you should start *asterisk* service using the following command:

```
service asterisk start
```

Or for the same purposes you can use the command:

```
service wyde start
```

After that you will see the screen similar to shown on Figure 18.

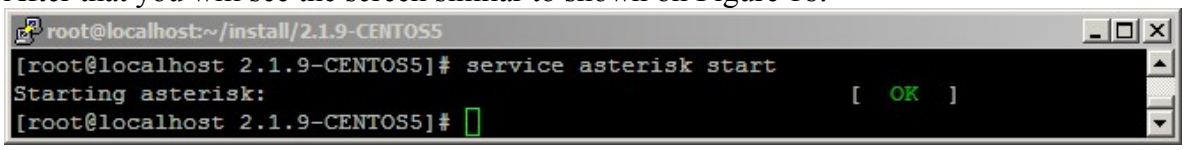

Figure 18: Starting *asterisk* Service after Frontend Installation Completed

Note this service is being started automatically once your computer restarted.

2.4: Backend Installation

Backend components contain the following packages:

- WYDE-2.1.mm-n
- WYDE-mpw-2.1.mm-n

The *mpw* service is being installed during backend installation.

To install WYDE conferencing bridge software backend components on separate computer you should start the installation as it was described in the beginning of this chapter and perform the steps from 1 till 4. After that the following steps should be implemented:

5. In select installation components question to perform backend components installation on the separate computer you should select BACKEND component only and unselect all other components, see Figure 19.

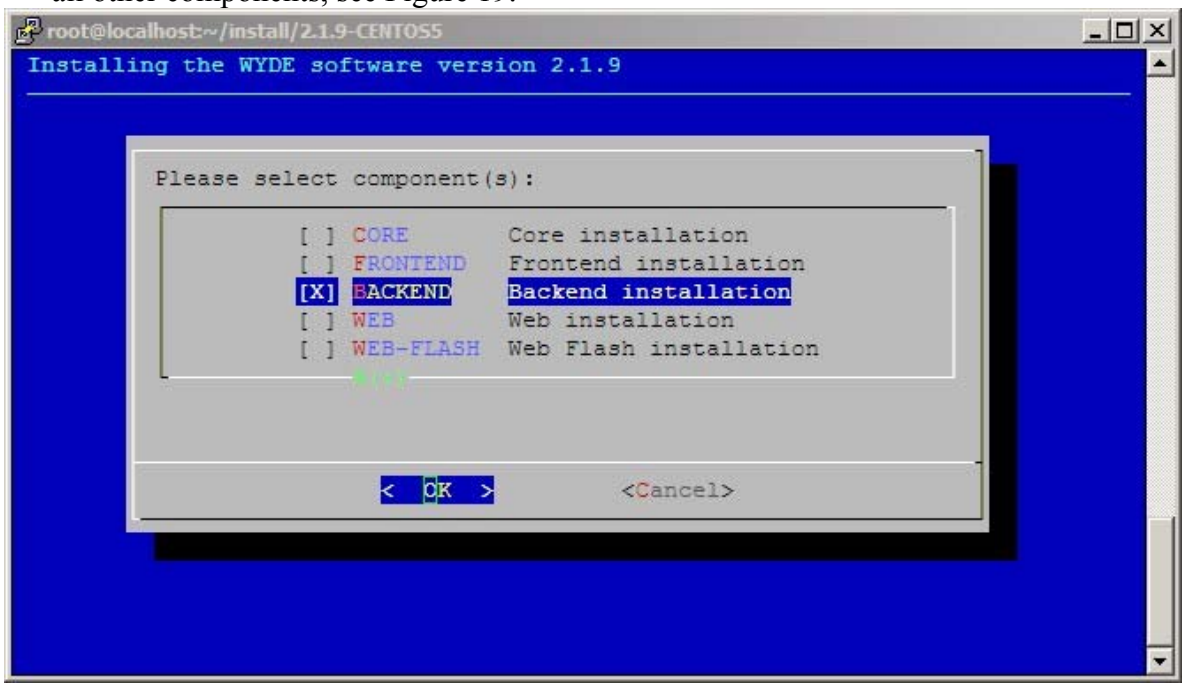

Figure 19: Installation "select components" Question, Backend Installation Selected

6. Next the installation program will ask you to enter your *dnca* core IP, see Figure 20. Here you should enter the IP of the computer where core components (*dnca* database, *mp* and *mf* services) have been installed.

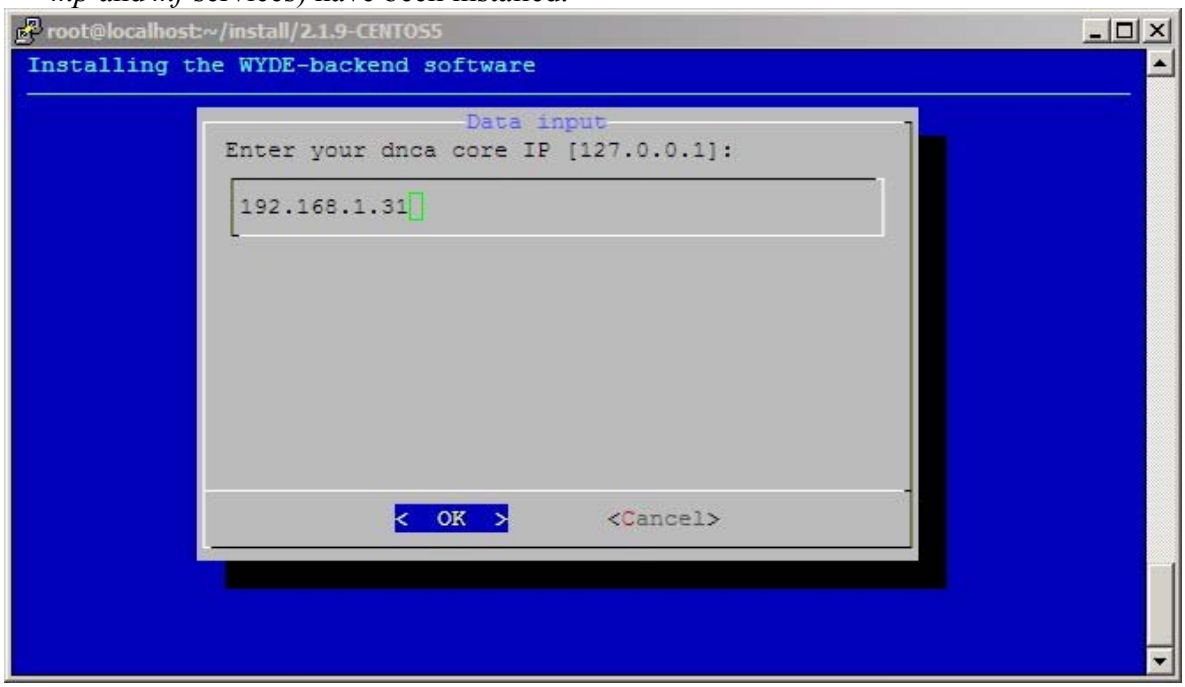

Figure 20: Backend Installation "dnca core IP" Question

7. After installation has been completed you will see the screen similar to shown on Figure 21.

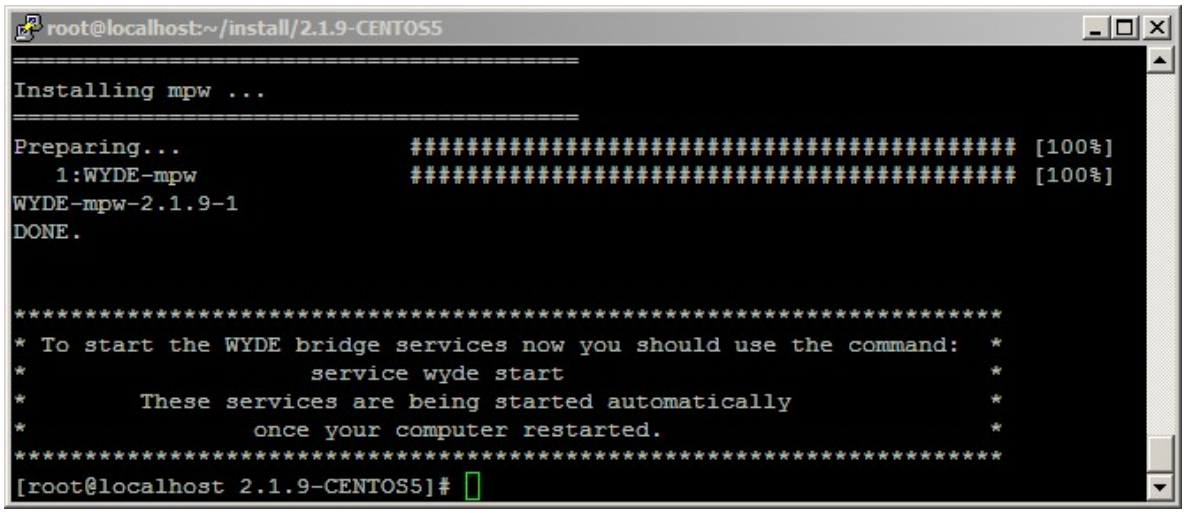

Figure 21: Backend Installation Completed Screen

You can check the installed backend packages using the command:
`rpm -qa | grep WYDE`
It should return the screen similar to shown on Figure 22.

Figure 22: Backend Installed Packages

After backend installation complete you should start *mpw* service using the following command:

```
service mpw start
```

Or for the same purposes you can use the command:

```
service wyde start
```

After that you will see the screen similar to shown on Figure 23.

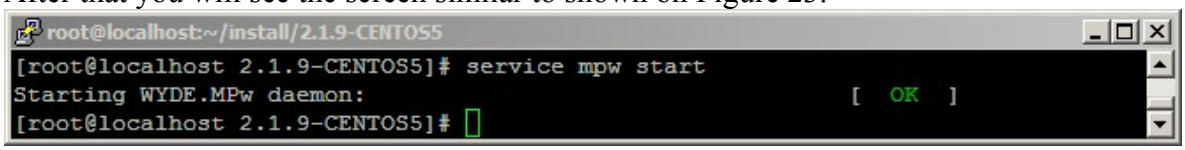

Figure 23: Starting *mpw* Service after Backend Installation Completed

Note this service is being started automatically once your computer restarted.

2.5: Web Installation

Web components contain the following packages:

- WYDE-2.1.mm-n
- WYDE-webapp-2.1.mm-n
- WYDE-webapp_wyde-2.1.mm-n

The *tomcat* service is being installed and configured during web installation.

To install WYDE conferencing bridge software Web components on separate computer you should start the installation as it was described in the beginning of this chapter and perform the steps from 1 till 4. After that the following steps should be implemented:

5. In select installation components question to perform backend components installation on the separate computer you should select WEB component only and unselect all other components, see Figure 24.

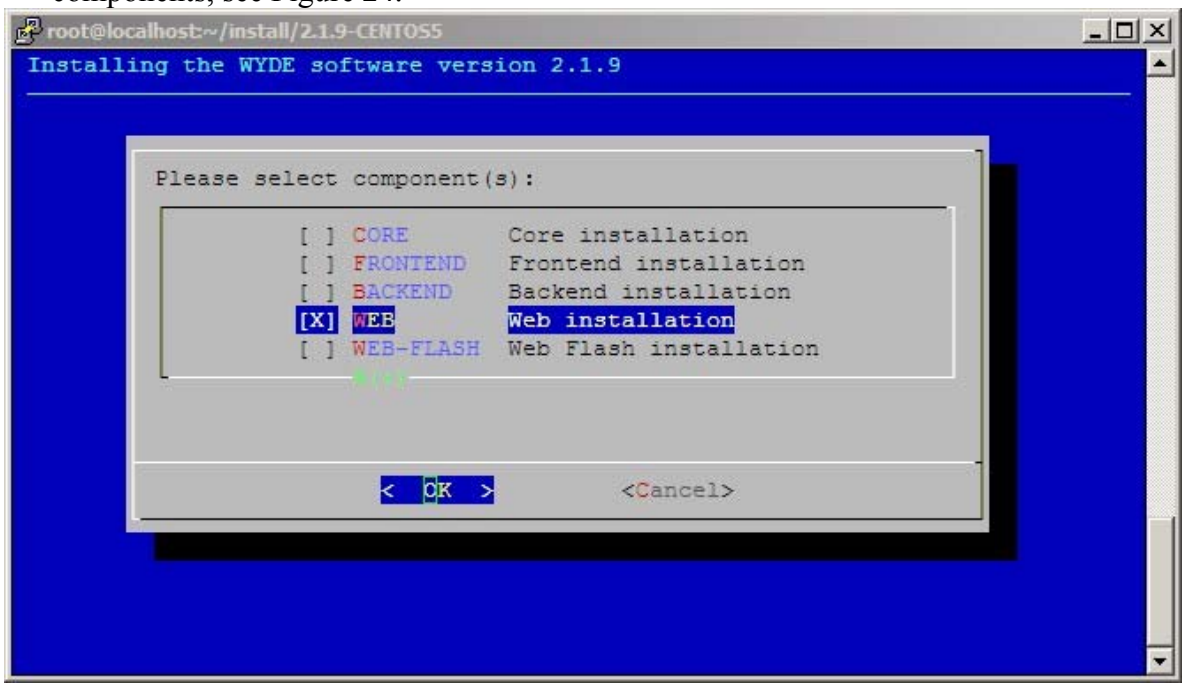

Figure 24: Installation "select components" Question, Web Installation Selected

6. Next the installation program will ask to enter your *dnca* database (db) IP, see Figure 25. Here you should enter the IP of the computer where *dnca* database has been installed (192.168.1.5 in our sample).

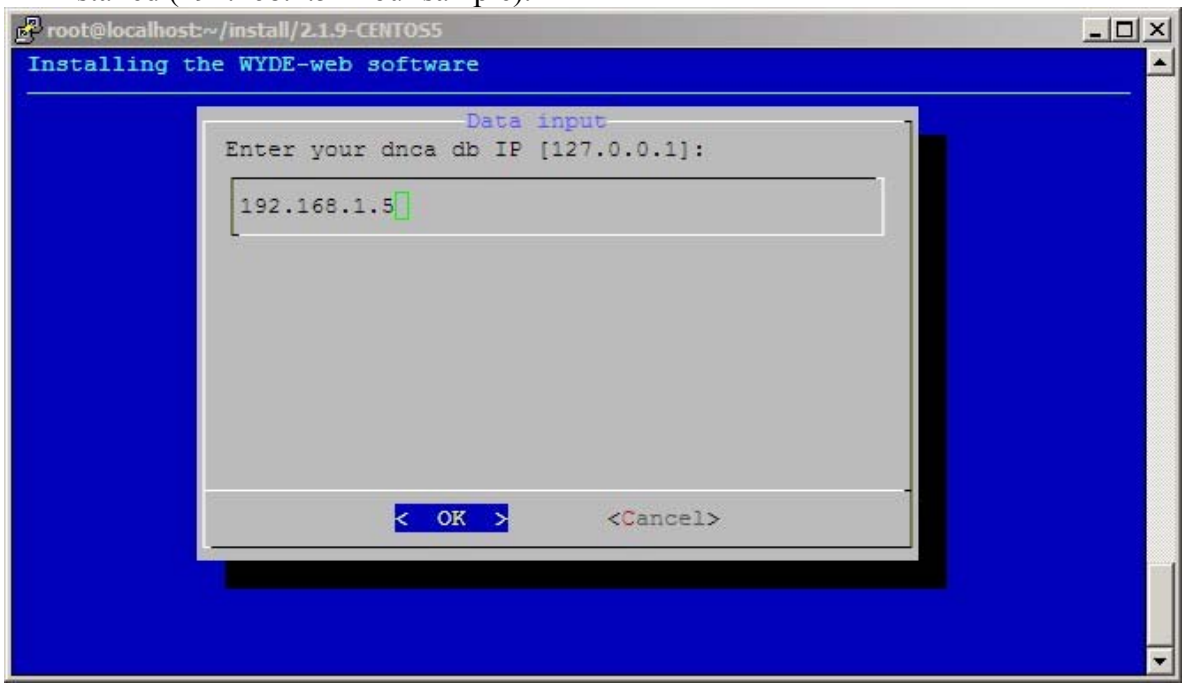

Figure 25: Web Installation "dnca db IP" Question

7. Next the installation program will ask to enter your username for *dnca* database, see Figure 26. The default username is *dnca*.

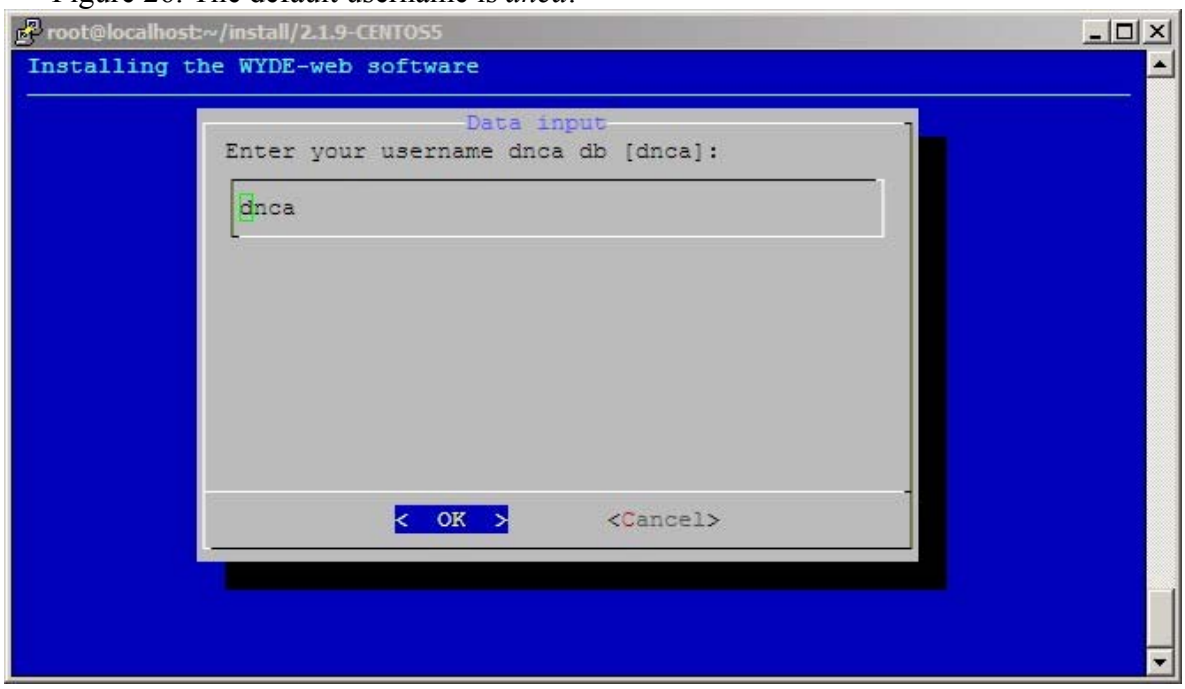

Figure 26: Web Installation "username dnca db" Question

8. Next the installation program will ask to enter your user password for *dnca* database, see Figure 27. The default password is *Qwerty*.

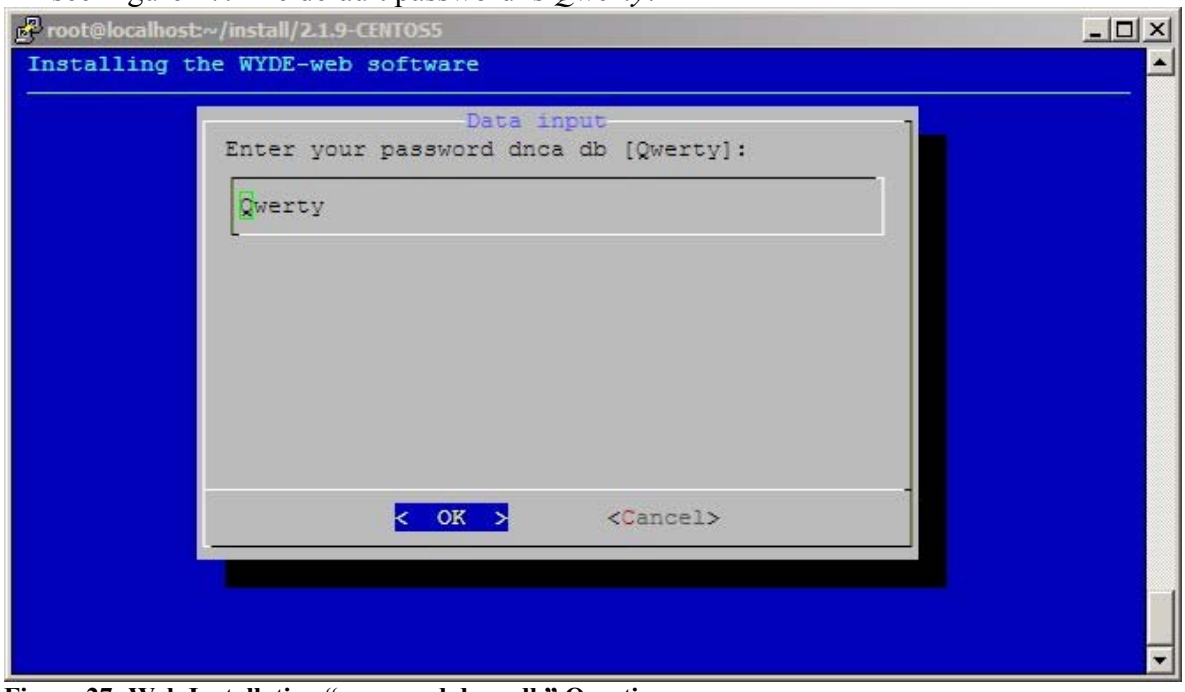

Figure 27: Web Installation "password dnca db" Question

9. When the installation process is completed the screen similar to shown on Figure 28 will appear.

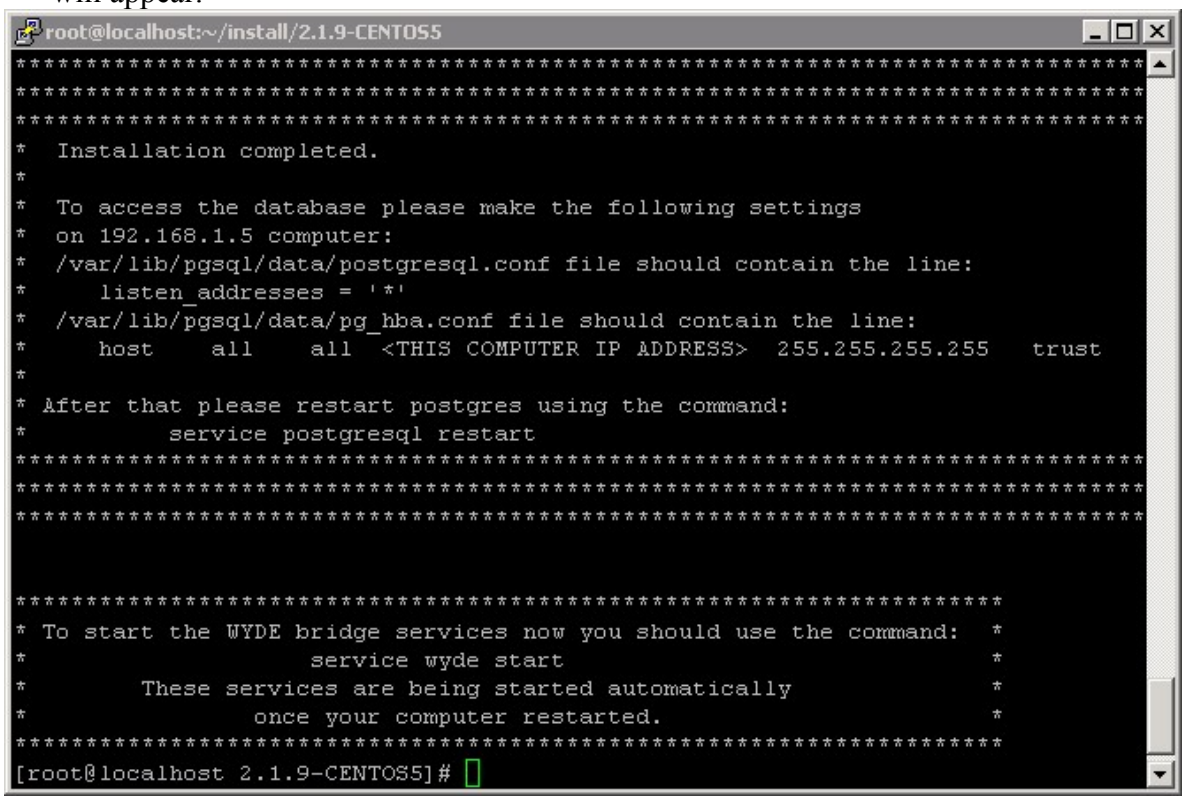

Figure 28: Web Installation Completed Screen

This screen informs you that you have to make additional changes on the computer that has *dnca* database (in our sample 192.168.1.5):

- you should change */var/lib/pgsql/data/postgresql.conf* file, this file should contain the following line:
  `listen_addresses = '*'`
  if this file does not have this line you should add to this file or you should modify the existing line. This parameter determines what IP addresses to listen on; '*' means all addresses.
- you should change */var/lib/pgsql/data/pg_hba.conf* file and to this file similar line:
  `host all all <THIS COMPUTER IP> 255.255.255.0 trust`
  where `<THIS COMPUTER IP>` is the IP of the computer where you are installing WYDE Web components. In our sample it is 192.168.1.32, so this line should be the following:
  `host all all 192.168.1.32 255.255.255.0 trust`
- After you have changed these files you should restart *postgres* using the command:
  `service postgresql restart`

You can check the installed web packages using the command:
`rpm -qa | grep WYDE`
It should return the screen similar to shown on Figure 29.

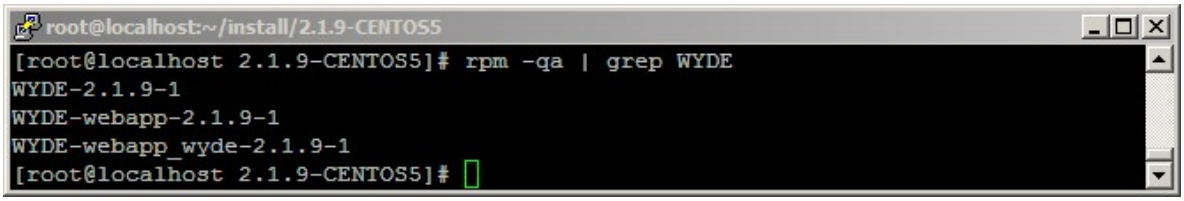

Figure 29: WYDE Web Installed Packages

After you have made the changes on the computer that has *dnca* database (in our sample 192.168.1.5) described in item 9 you should start *tomcat* service using the following command:

```
service tomcat start
```

Or for the same purposes you can use the command:

```
service wyde start
```

After that you will see the screen similar to shown on Figure 30.

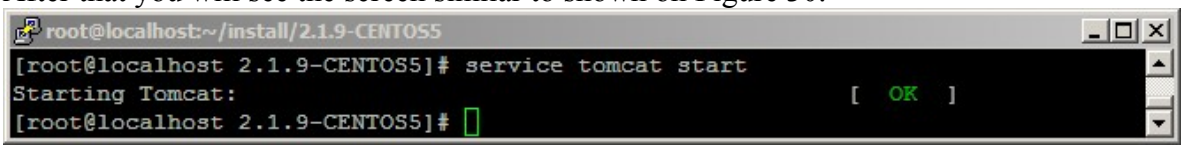

Figure 30: Starting *tomcat* Service after Web Installation Completed

Note this service is being started automatically once your computer restarted.

Once this has been done you are able to use Web Administration Interface from this computer using URL *http://<this computer IP>/* (*http:///192.168.1.32/* in our sample). See Chapter 4: Verify Software Installation for details.

2.6: Web Flash Installation

Web flash components contain the following packages:

- WYDE-2.1.mm-n
- WYDE-storage-2.1.xx-y
- WYDE-supportmodule-2.1.xx-y
- WYDE-wydevoice-2.1.xx-y

The *tomcat* service is being installed and configured during flash web installation.

To install WYDE conferencing bridge software Web components on separate computer you should start the installation as it was described in the beginning of this chapter and perform the steps from 1 till 4. After that the following steps should be implemented:

5. In select installation components question to perform backend components installation on the separate computer you should select WEB component only and unselect all other components, see Figure 31.

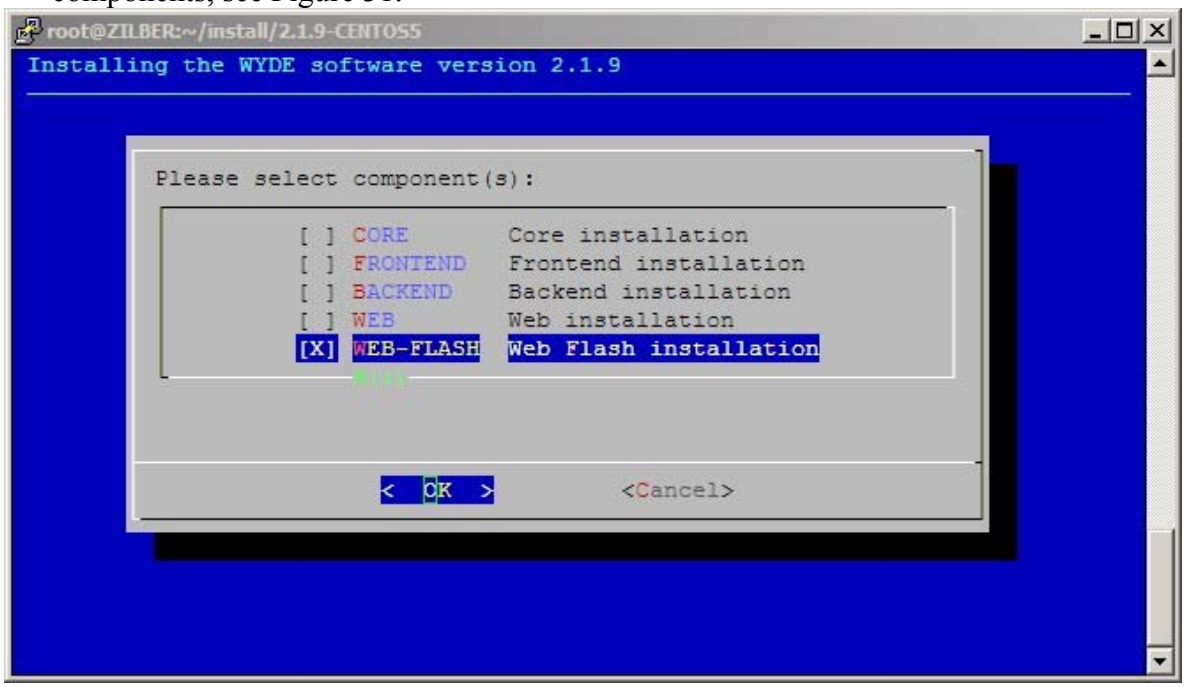

Figure 31: Installation "select components" Question, Web Flash Installation Selected

6. Next the installation program will ask to enter your WYDE web services IP address, see Figure 32. Here you should enter the IP of the computer where web components have been installed (192.168.1.32 in our sample if we would like to refer to web components installation described in the previous section 2.5: Web Installation).

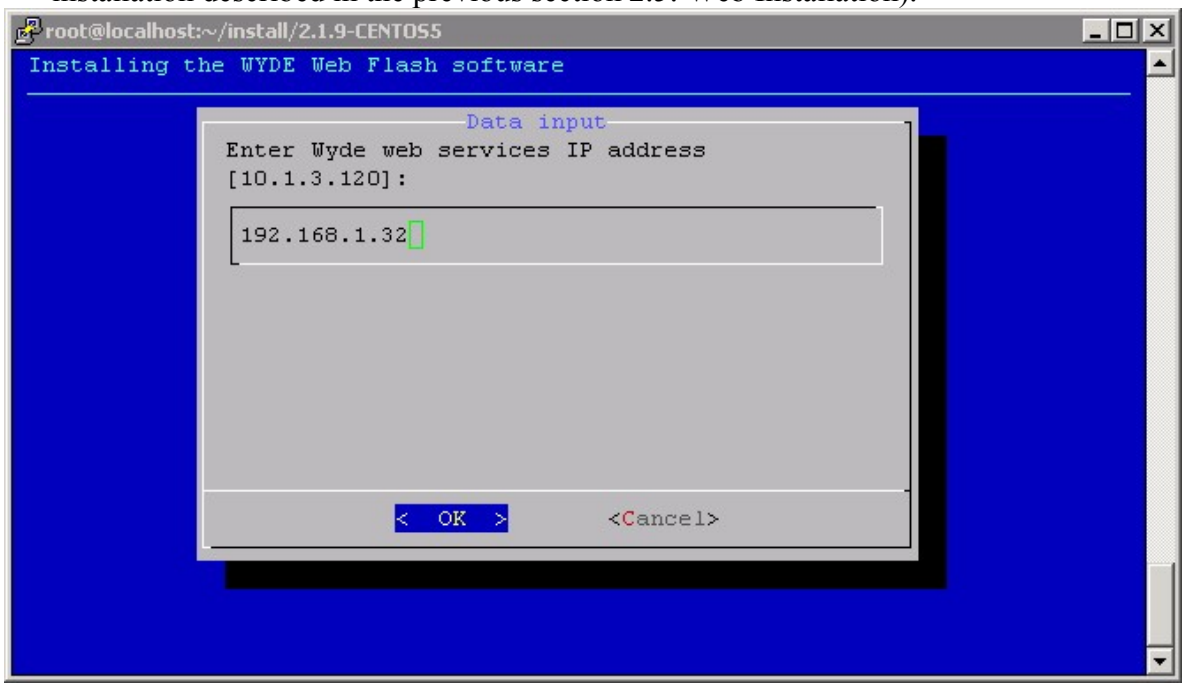

Figure 32: Web Flash Installation "WYDE web services IP address" Question

7. When the installation process is completed the screen similar to shown on Figure 33 will appear.

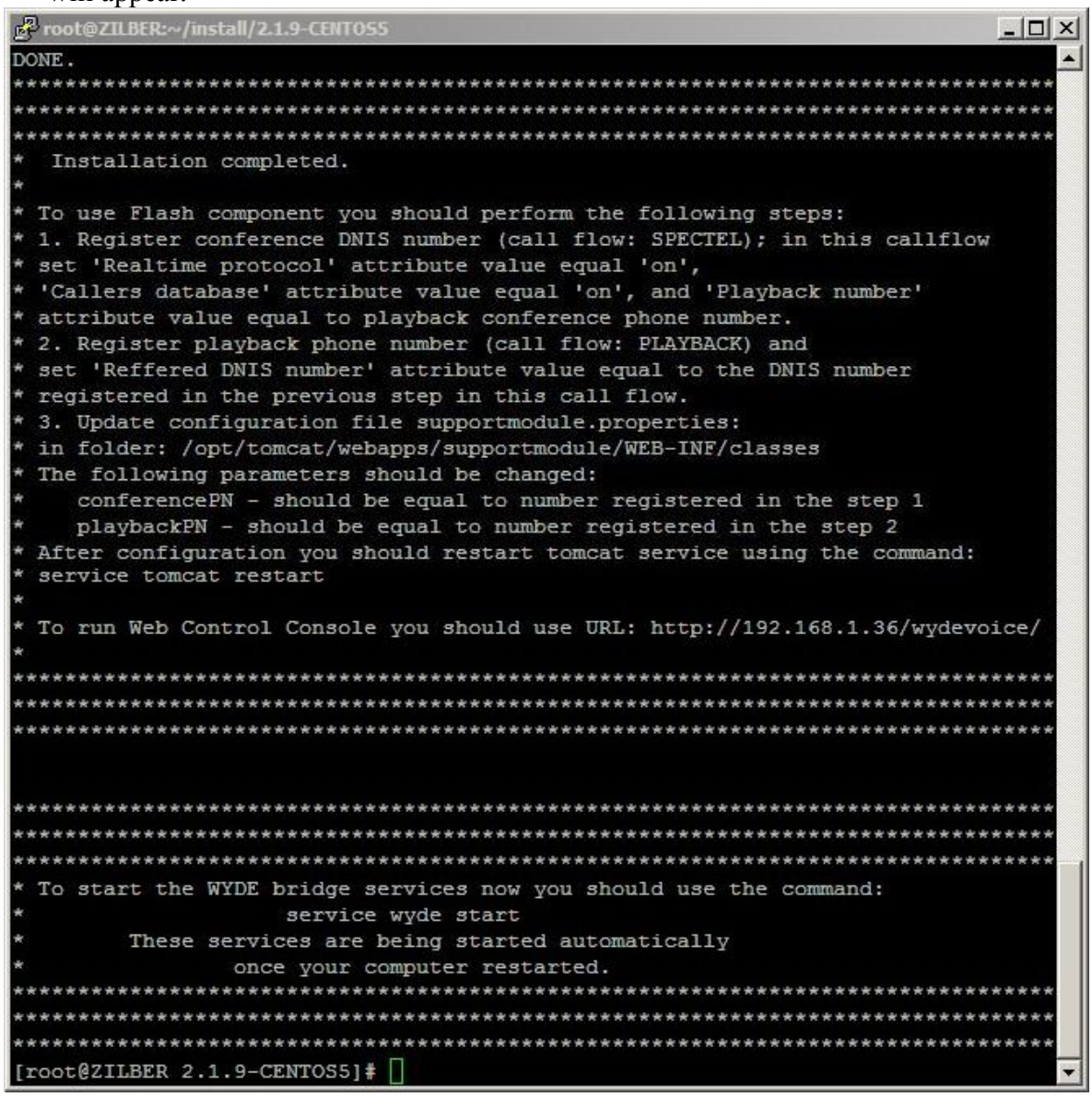

Figure 33: Web Flash Installation Completed Screen

This screen informs you that you have to make additional changes to use installed Flash component:

i) Register conference DNIS number (call flow: SPECTEL); in this call flow set "*Realtime protocol*" attribute value equal "`on`", "*Callers database*" attribute value equal "`on`", and "*Playback number*" attribute value equal to playback conference DNIS number;
ii) Register playback conference DNIS number (call flow: PLAYBACK) and in this call flow set "*Reffered DNIS number*" attribute value equal to the DNIS number registered in the previous step;
iii) Update the configuration file *supportmodule.properties*

in folder: */opt/tomcat/webapps/supportmodule/WEB-INF/classes*
The following parameters should be changed:
`conferencePN` – should be equal to number registered in the step *i)*;
`playbackPN` – should be equal to number registered in the step *ii)*.

After this configuration has made you should restart *tomcat* service using the command:
`service tomcat restart`

You can check the installed web packages using the command:
`rpm -qa | grep WYDE`
It should return the screen similar to shown on Figure 34.

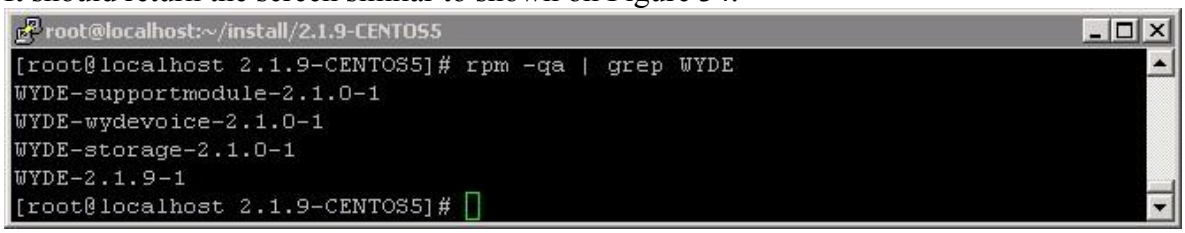

Figure 34: WYDE Web Flash Installed Packages

After you have made necessary changes in the configuration described in item 7 you should start *tomcat* service using the following command:
`service tomcat start`
Or for the same purposes you can use the command:
`service wyde start`
After that you will see the screen similar to shown on Figure 35.

Figure 35: Starting *tomcat* Service after Web Flash Installation Completed

Note this service is being started automatically once your computer restarted.

Once this has been done you are able to use Flash version of Web Control Console (WCC) from this computer using URL *http:///<this computer IP>/wydevoice/* (for example *http://192.168.1.36/wydevoice/*). See Chapter 4: Verify Software Installation for details.

2.7: Cluster Installation

If you are going to use large bridges that process large amount of simultaneous calls, you may need to consider cluster installation of the WYDE software. WYDE software core components (dnca database, mp and mf services) can be installed on two Linux computers that are joined together in the cluster. In cluster installation the core components are being installed on two computers.

Cluster installation depends on specific client's needs; entirely different installation procedures could be used for this installation type.

Cluster installation is quite difficult. If you need cluster installation please contact WYDE Voice technical support for detail instructions and assistance in cluster installation of the WYDE Voice conferencing bridge software.

2.8: Upgrade Installation

If it is necessary you can always upgrade the WYDE conferencing bridge software to newer version. To do that you should perform the following steps:

1. Go to the installation folder of the software, for instance, type:
   `cd /root/install/2.1.22-CENTOS5/`
   if you have copied new installation files into this folder.
2. Type `./setup.sh` to start the installation process.
3. The screen shown on Figure 2 will appear next.
4. Select the WYDE components question will appear next as shown on Figure 36.

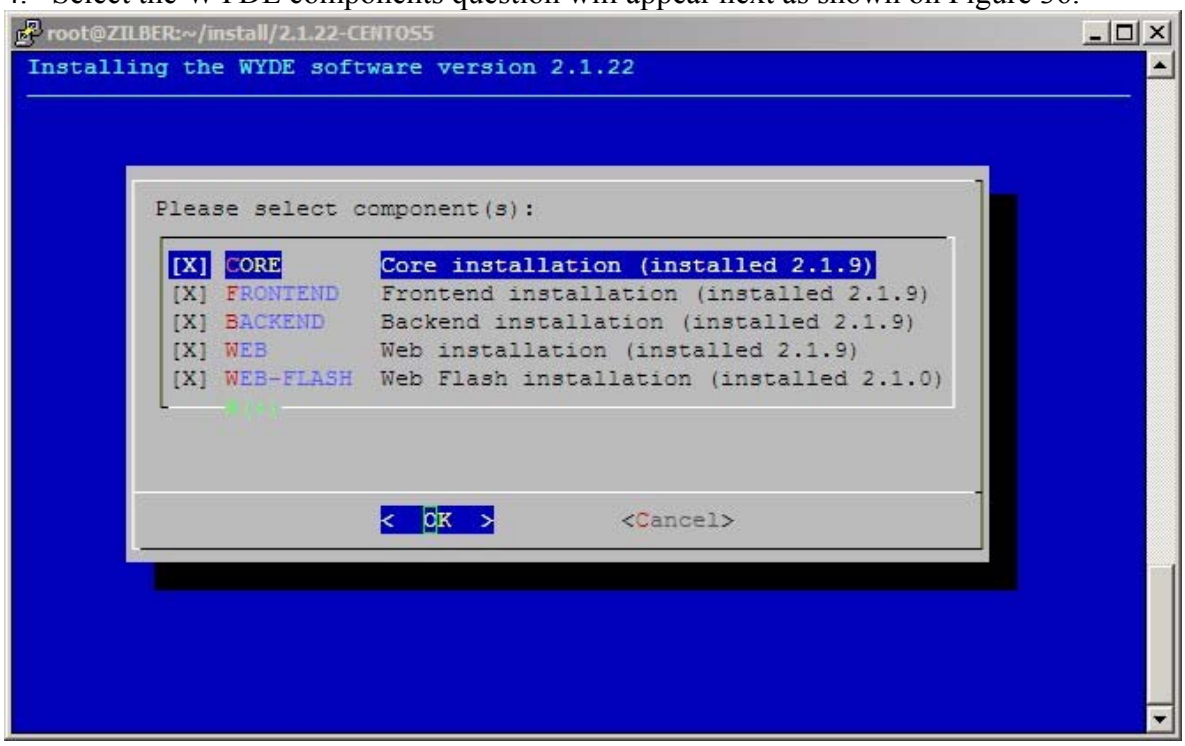

Figure 36: Update Installation "select components" Question

On this screen you will see the version of the already installed components. If the component was not installed there will be not any version near the component description. You should select the components you would like to upgrade. If you select the components that were not installed, the new installation will be performed for such components.

5. After that the selected components will be upgraded using the same configuration parameters that you are already using in the previous version,

2.9: Un-installation

If for some reasons you would like to uninstall the product you should perform the following steps:

1. Go to the installation folder of the software, for instance, type:
   `cd /root/install/2.1.9-CENTOS5/`
   if you have copied installation files into this folder.
2. Type `./uninstall.sh` to start the installation process.
3. After that un-installation process begins and all WYDE Voice software installed components will be removed. See Figure 37 for details.

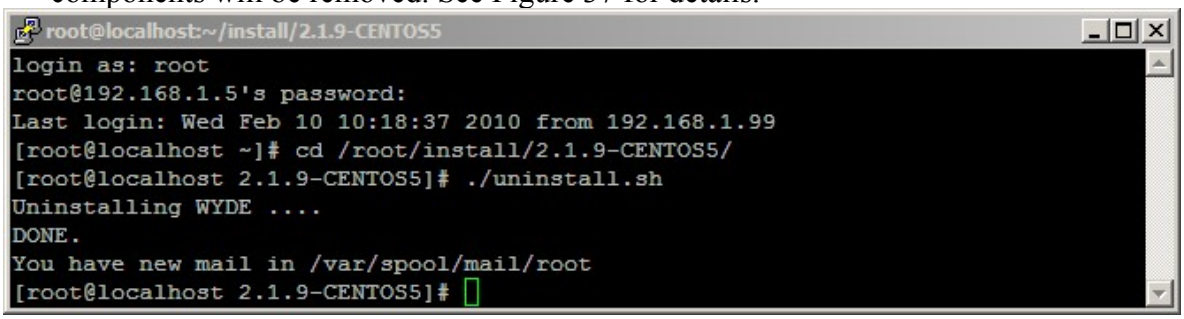

Figure 37: Uninstall WYDE Voice Software

Note the un-installation process removes all installed WYDE components. You can not select the specific component to uninstall.

Chapter 3: Licensing

By default the WYDE Voice conferencing bridge software has the maximum number of the simultaneous calls on the bridge equal to 10. To support larger number of calls you should obtain the additional licenses.

To obtain additional licenses you should perform the following steps:

1. Generate hardware profile.
   Additional licenses are tied to the hardware that you are using. The installation program (core components) creates the file with hardware profile *hws.bin* in the folder */usr/local/DNCA/etc/*. Also this file can be generated at any time manually using the command:
   `/usr/local/DNCA/bin/hwsgen.x`
   This command generates hardware profile file *hws.bin* in the current folder.

2. After that you should go to the WYDE Voice Licensing Server site at http://licserver.wydevoice.com/, see Figure 38.

Figure 38: WYDE Voice Licensing Server Login Screen

You should login to the Licensing Server using login/password provided to you. The screen similar to shown on Figure 39 appears next.

Figure 39: WYDE Voice Licensing Server Main Screen

3. Generate license files.
   License files are being generated based on hardware profiles – *hws.bin* files. To get additional licenses you should populate data in the "*Enter Details for New License*" section:
   - Choose License Type – you should select one of the following types:
     - Standard – if you are installing the system on single machine (in this case you will need one hardware profile file and one license file will be generated);
     - Cluster – if you are installing the system on cluster of two machines (in this case you will need two hardware profile files (from each cluster computer) and two license files will be generated);
   - HW Signature – the file or files on your local disk with the hardware profile;
   - Ports Amount – the number of simultaneous calls that should be provided by the license, the number of requested ports will be decreased from the total number of ports available for you (i.e. ports remained will be decreased);
   - Comments – your comment for the generated license.

   For instance if you would like to get the single server license for 200 simultaneous calls you should populate the form as shown on Figure 40. If you would like to get the cluster servers licenses for 200 simultaneous calls you should populate the form as shown on Figure 41. Once you populated the form you should press "*Get License*" button and new license will be generated, *license.bin* file with license information will be downloaded.

Figure 40: Enter Details for New Standard License

Figure 41: Enter Details for New Cluster License

Recently generated licenses can be seen in the Licensing Server "Recent Licenses" section, see Figure 42. You can download generated license file (*license.bin*) if you press "*Download*" button.

Figure 42: WYDE Voice Licensing Server – Recent Licenses

Each license file has expiration time; once the license file is expired the maximum number of simultaneous calls will be reset to 10. After that the WYDE bridge software will try to renew and register the license via internet (http) automatically. If for some reason the license file could not be renewed automatically the notification email would be sent to you to the address that is registered in WYDE Voice Licensing Server as your login (see Figure 39, "Account Details" section, "E-mail" field). After that you should go to the licensing server and update the expired license manually. See Figure 43 for details. Press "*Update*" button to generated renewed license. After that the screen changes as shown on Figure 42, i.e. "*Update*" button will be replaced with "*Download*" button and you will be able to download new valid *license.bin* file.

Figure 43: Update Expired Licenses

4. Generated license file *license.bin* (either if it is new license of renewed license) should be placed on the bridge into */usr/local/DNCA/etc* folder. After that you should register new license using the following command:
   `wyde register-license`
   The screen similar to shown on Figure 44 appears next.

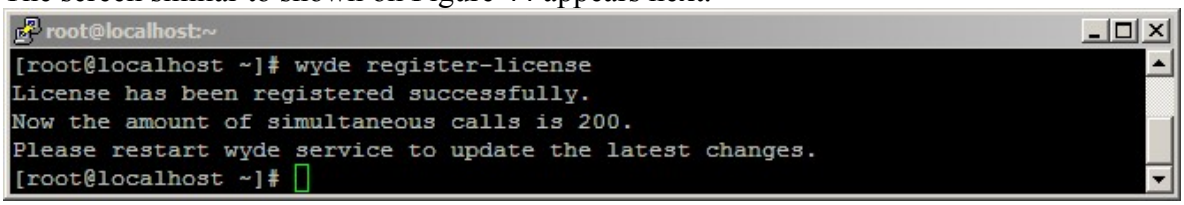

Figure 44: Register New/Updated Licenses on the Bridge

   After that the amount of allowed simultaneous calls for the WYDE Voice conferencing bridge software will be set equal to the amount specified by your license file.

Note when your license is going to be expired within the next 5 days you will receive notification email "*Alert: License will expire soon*" about that as shown below. This email contains the information about your current license and the URL to renew it.

Alert: License will expire soon

```
This is to inform you that WYDEVoice client:

  Name: Michael Smith
  Login: wyde@enols.com

Has a license that will expire soon:

  - type: standard
  - ports amount: 800
  - comments: 192.168.1.5 server license updated
  - expired: 2010-06-30 04:21:40

The license file can be renewed at any time through the following URL:
http://licserver.wydevoice.com/get_license?id=9b7f7b482109a79e5073e183dc557926dWlkPTImbGlk
PTE=

Total number of ports taken by all licenses is 800/1000 (80%).

Thank you,
http://licserver.wydevoice.com
```

If you click the URL from this email your license will be renewed and you will be prompted to download the updated *license.bin* file as shown on Figure 45. The license will be extended, and new license expiration date will be equal to the current date plus user's license duration.

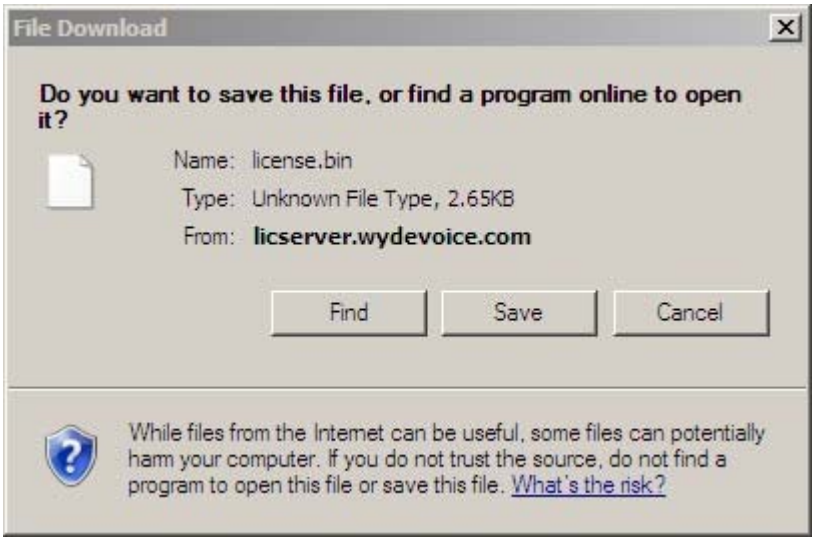

Figure 45: Download Renewed *license.bin* File

Once your license is renewed you will receive another notification email "*Update License Notice*" about that as shown below. This email contains updated information about your current license, i.e. it contains new expiration date of your license.

Update License Notice

```
This is to inform you that WYDEVoice client:

  Name: Michael Smith
  Login: wyde@enols.com

Has successfully renewed license file:

  - type: standard
  - ports amount: 800
  - comments: 192.168.1.5 server license updated
  - expired: 2010-07-01 07:17:59

The license file can be renewed at any time through the following URL:
http://licserver.wydevoice.com/get_license?id=9b7f7b482109a79e5073e183dc557926dWlkPTImbGlk
PTE=

Total number of ports taken by all licenses is 800/1000 (80%).

Thank you,
http://licserver.wydevoice.com
```

In addition if your license is expired you will also receive alert email "*Alert: Expired license has been found*" about that as shown below with the information about your current license status.

Alert: Expired license has been found

```
This is to inform you that WYDEVoice client:

  Name: Michael Smith
  Login: wyde@enols.com

Has an expired license:

  - type: standard
  - ports amount: 800
  - comments: 192.168.1.5 server license
  - expired: 2009-12-10 09:54:11

The license file can be renewed at any time through the following URL:
http://licserver.wydevoice.com/get_license?id=9b7f7b482109a79e5073e183dc557926dWlkPTImbGlk
PTE=

Total number of ports taken by all licenses is 800/1000 (80%).

Thank you,
http://licserver.wydevoice.com
```

Chapter 4: Verify Software Installation

If the installation was successful you should be able to call on your bridge. You can use X-Lite or SJphone softphones to make VOIP call on your bridge using the IP address that was entered during installation as your host IP (see Figure 4). For instance you can make the call to *10@<your bridge IP>* (*10@192.168.1.5* in our sample) via SJphone.

In addition you should be able to open Web Administration Interface in your browser from the computer where you installed web components (or from the computer where full installation has been made). You should use the IP address of this computer to do that, i.e. you should type *http://<your bridge Web IP>/* (*http://192.168.1.5/* in our sample) in your browser URL bar. You should see a screen similar to the shown on Figure 46. Use PIN: *admin* and password: *admin* to login to the installed system,

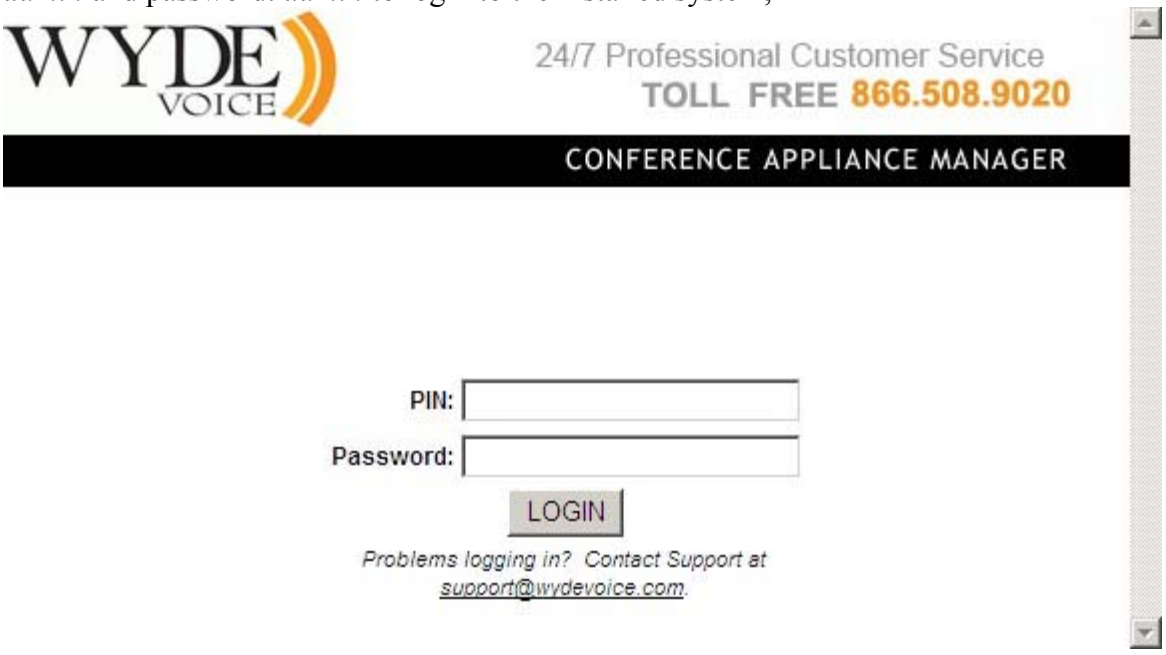

Figure 46: Initial Web Administration Login Screen

Note <*your bridge IP*> and <*your bridge Web IP*> could be different:
<*your bridge IP*> – the IP of the computer where you have installed core components;
<*your bridge Web IP*> – the IP of the computer where you have installed web components.

When the calls are made on the bridge you should be able to see the conferences and the calls using Web Administration Interface; you will see the screen similar to shown on Figure 47.

Figure 47: Conference Calls Screen when the First Two Calls made on the Bridge

If you have installed web Flash component you should be able to use Web Control Console (WCC) from the computer where you installed it. You should use the IP address of the computer where you have installed web flash component, i.e. you should type *http://<your bridge Web Flash IP>/wydevoice/* (for instance *http://192.168.1.5/wydevoice/*) in your browser URL bar. You should see a screen similar to the shown on Figure 48.

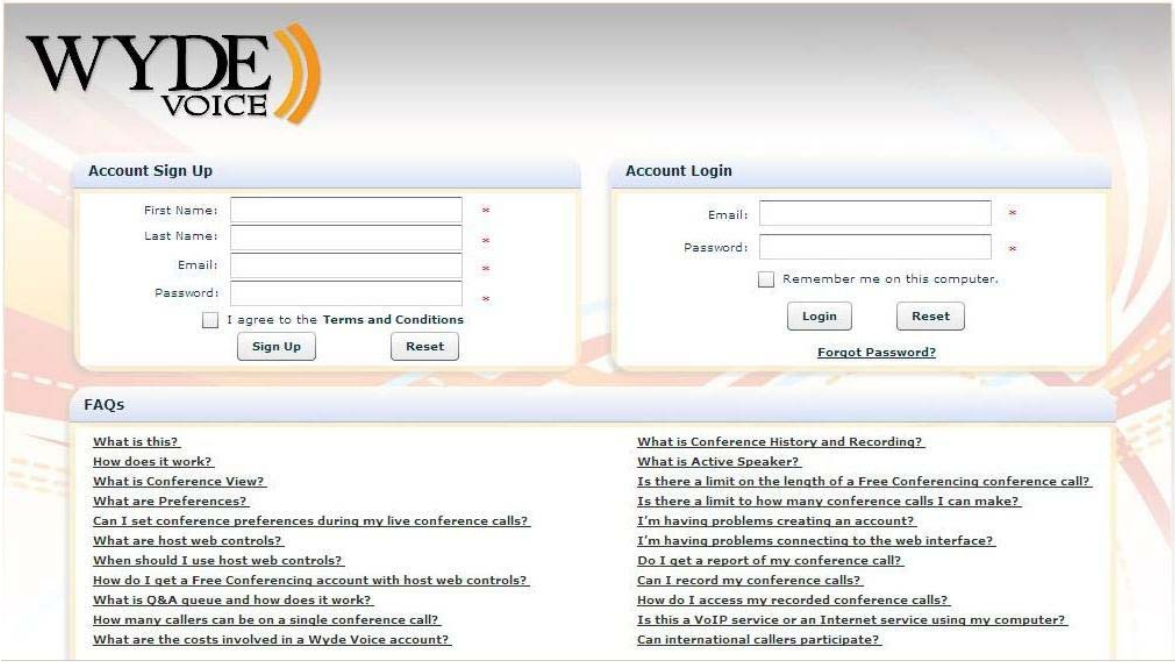

Figure 48: Initial Web Control Console Login Screen

Appendix A: Support Resources

If you have difficulty with this guide and any of the procedures listed herein, please contact us using the following support resources.

Support Documentation

In addition to this Guide, you may obtain other WYDE Voice documentation from WYDE Voice or from the support section of http://www.wydevoice.com/.

Web Support

Our support website is available 24 hours a day, 7 days a week, and 365 days a year at http://www.wydevoice.com. You may download patches, support documentation and other technical support information.

Telephone Support

For difficulties with any procedures described in this Guide, please contact us at 866-508-9020 during our normal phone support hours of 7:00 am to 6:00 pm Pacific Standard Time (PST). An engineer will respond to your inquiry within 24 hours.

Email Support

You may also email us your questions at support@wydevoice.com. We will respond to your question within 24 hours.