

OVERVIEW

Net Server allows applications to integrate with the IPedge system to provide advanced services. Toshiba Call Manager is an example of client application which works with the IPedge. Other applications such as Toshiba ACD is also integrated with IPedge through the Net Server. In order to support those applications, Net Server manages Call Manager users, other application login credentials, and user groups.

All users will have Call Manager Advanced with Voice Client VoIP plug-in soft phone installed.

Note: Soft IPT stand-alone softphone is not supported on VIPedge Systems.

Net Server

Not Applicable.

Net Server

Not applicable.

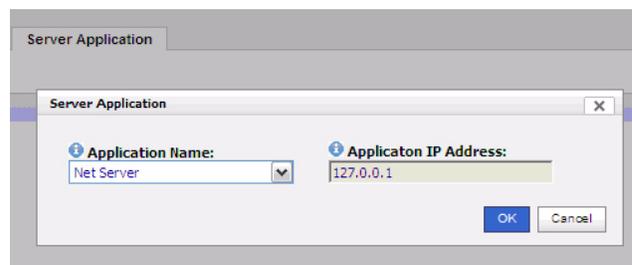
PROGRAMMING

Net Server is pre-installed on the IPedge system and can be activated using IPedge Enterprise Manager. Add Net Server to Enterprise Manager and configure the IO port in the IPedge system. After applying the license, Net Server is ready to be used. If further configuration of Net Server is necessary for server based Call Manager configuration, please see Net Server administration section [page -5](#) for details.

- ADD NET SERVER**
1. Using your web browser, enter the Enterprise Manager application IP address.
 2. From the Administration menu, select Enterprise > Component Services.



3. Click the Server Application tab.
4. Click the Add icon.
5. Select Net Server from the Application Name list (shown below).



6. Add the IP Address: 127.0.0.1
7. Click OK.

SETUP THE I/O PORT

1. Using Enterprise Manager, go to System > I/O Device.
2. Click the New icon.
3. Choose any one of available CTI#0~8 for the Logical Device No.
4. Set the Application Type to Server
5. Server Port No. must be 1100 for Net Server.

Important! Do not configure any other application including Attendant Console to use Port 1100.

6. Click the Save icon.

NET SERVER ADMINISTRATION

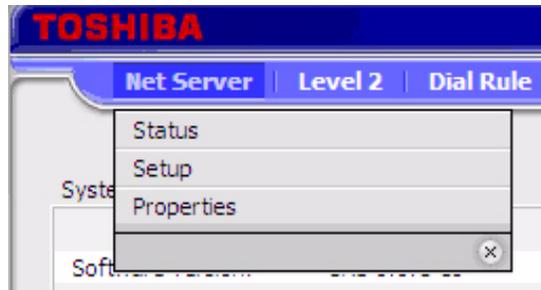
Net Server administration allows the administrator to configure the Net Server to control the behavior of Call Manager client application. It is designed to provide the basic operations of Call Manager without any configuration. If the administrator requires the advanced operations such as pushing settings to the clients, Net Server administration needs to be used.

To access Net Server

Using Enterprise Manger, go to Application > Net Server menu.

NET SERVER MENU

Net Server menu provides access to the basic setup for Net Server application on IPedge server.



Status The Status sub menu provides real time information on the Net Server.

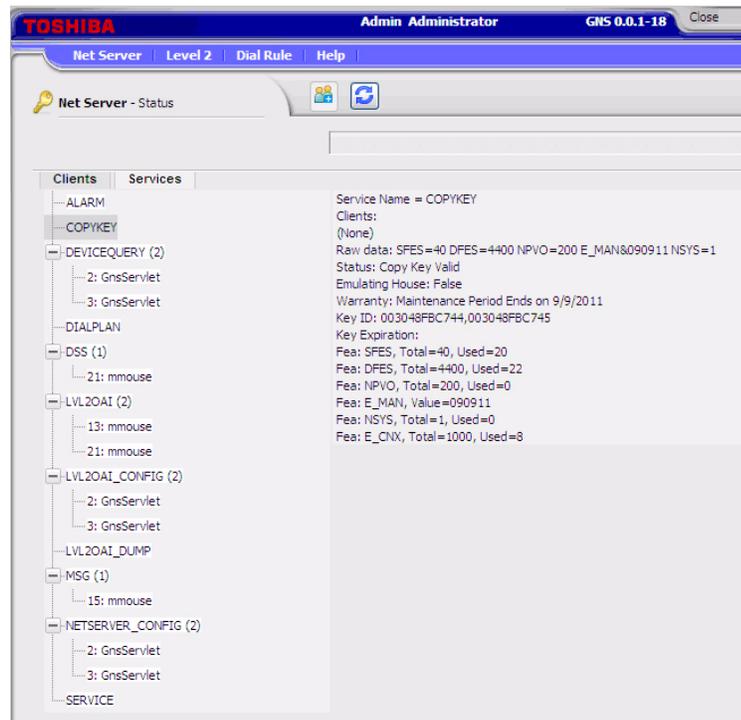
Clients Tab

Clients tab shows the status of all the client applications that are connected to the Net Server. It includes all the component applications that are parts of Net Server and all the client Call Manager applications that are connected to the Net Server.



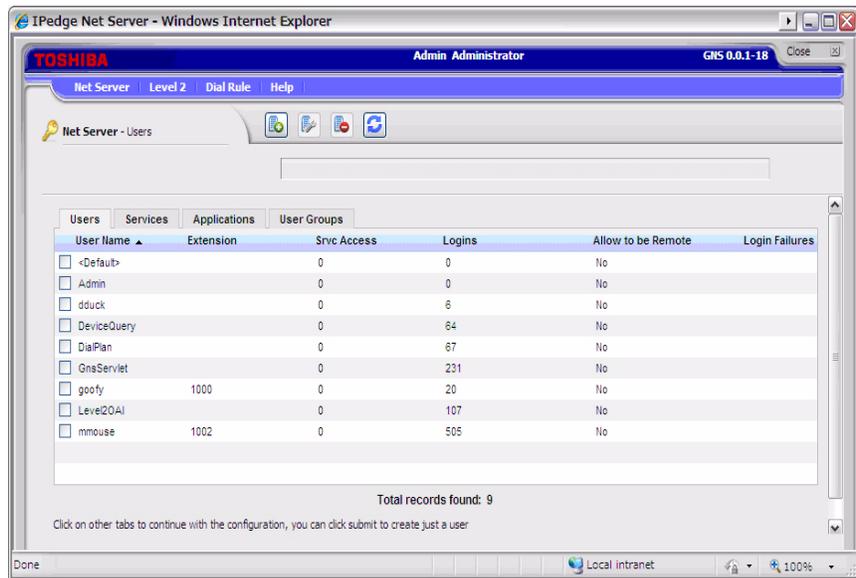
Services Tab

Services tab shows the real time status of system component services running.

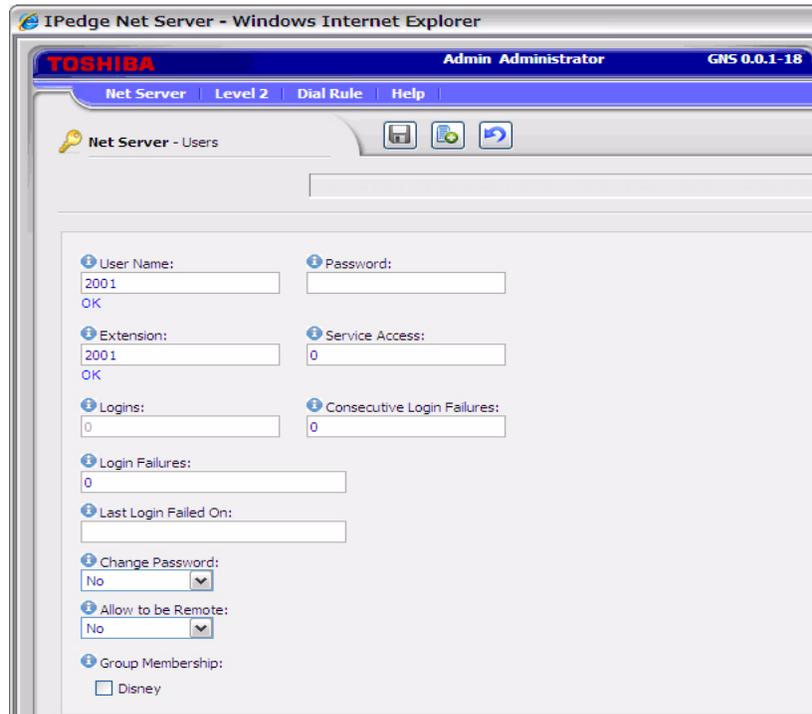


Setup Setup sub menu allows the administrator to manage client users, service components, applications, and groups.

Users tab is used to manage the login information of the client applications. Clients can be automatically added (see **Net Server Property sub menu**) or can be added/modified from this tab.



When you Add or Edit a checked entry, data can be entered from the following screen.

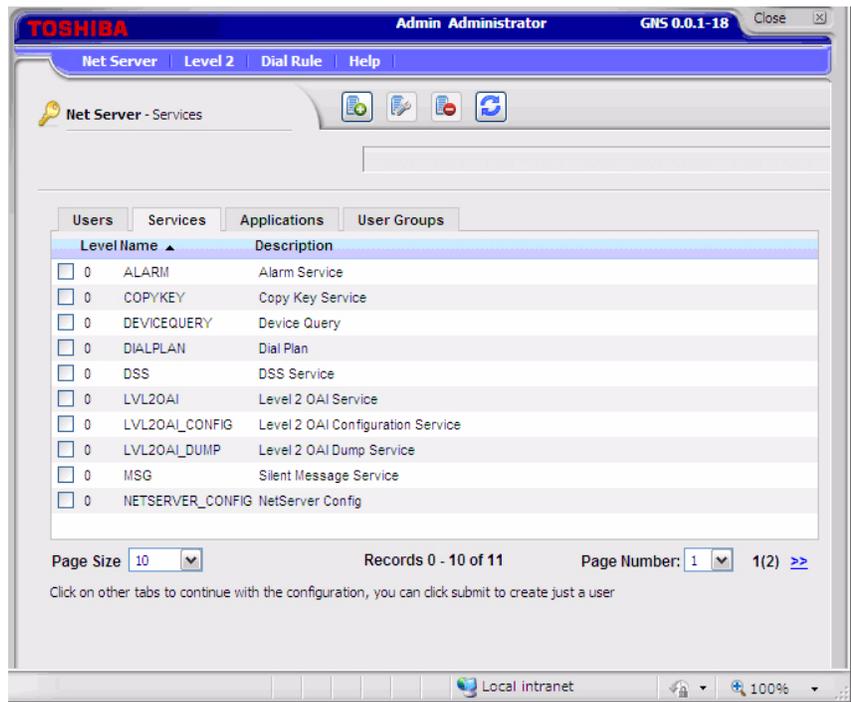


Name	Description
User Name	Name of the user to use for Net Server login
Password	Password used for Net Server login
Extension	Directory Number (DN) of extension that the user controls
Service Access	This is a number that determines which services the client has access to. Each service has a Service Level number, and a client will have access to all services whose Service Level is less than or equal to the client's service level access number.
Logins	Count of logins
Consecutive Login Failures	Count of consecutive login failures. Can be edited to reset the count.
Login Failures	Count of login failures. Can be edited to reset the count.
Last Login Failed on	Date and time of the last login failure
Change Password	Yes to allow the user to change the password
Allow to Remote	Yes to allow the user to connect remotely using the remote port (TCP port:8768)
Group Membership	A list of defined Groups is listed, Placing a check mark in the appropriate Group Name assigns that user to that Group. New Group can be created from User Group tab.

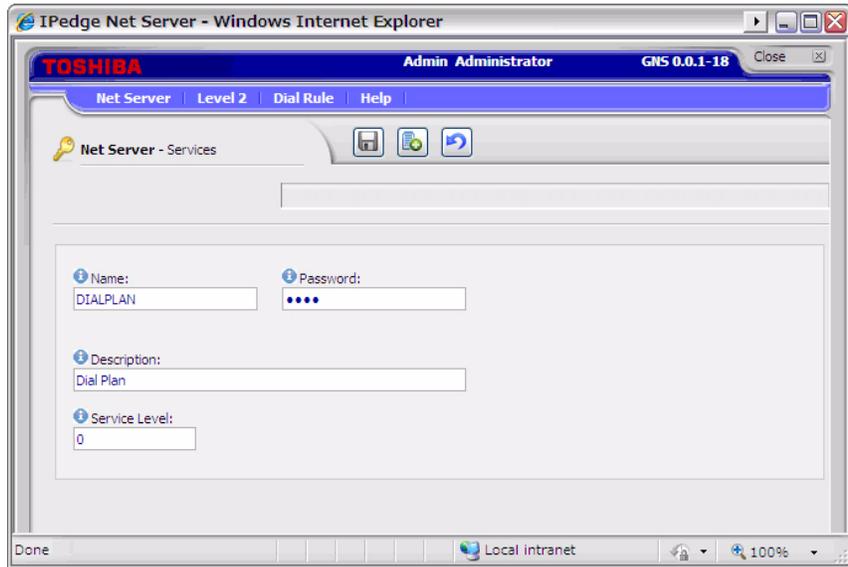
Services Tab

Use the Services tab to manage the component services running under Net Server.

It defines which services are on the server and what clients can use them. Services are automatically defined when they are installed, and do not need to be modified.



When you Add or Edit a checked entry, data can be entered from the following screen.

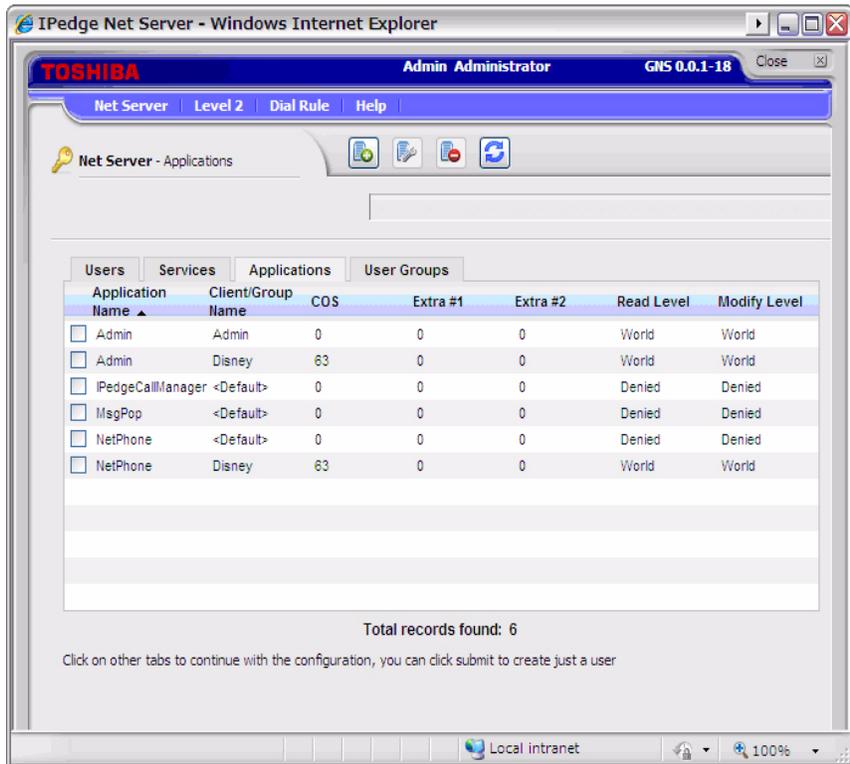


Field	Description
Name	Service name which must be unique in the system
Password	Password for the service to login to Net Server. Typically, it should not be changed.
Description	Description of the service
Service Level	Service Level determines which clients can access this service. Each client has a service level access number, and a client will have access to all services whose Service Level is less than or equal to the client's service level access number.

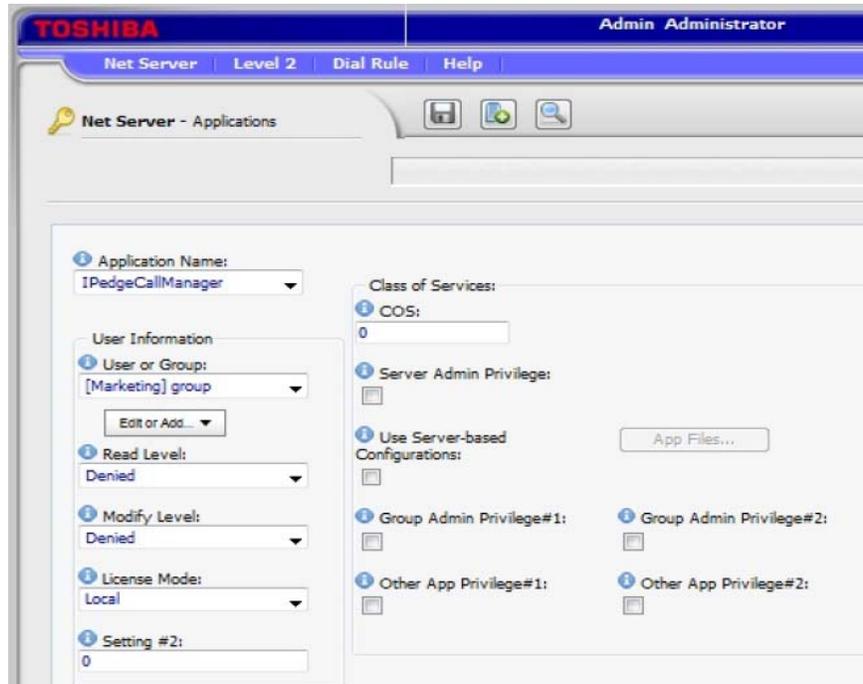
Application Tab

The Application tab defines the users for each application and allows you to assign a policy based on the user or the group. Please see Group tab section for the specific information on the group policies.

See the “[Server Based Call Manager Configuration](#)” on [page -22](#) for setting up the server based configuration for Call Manager.



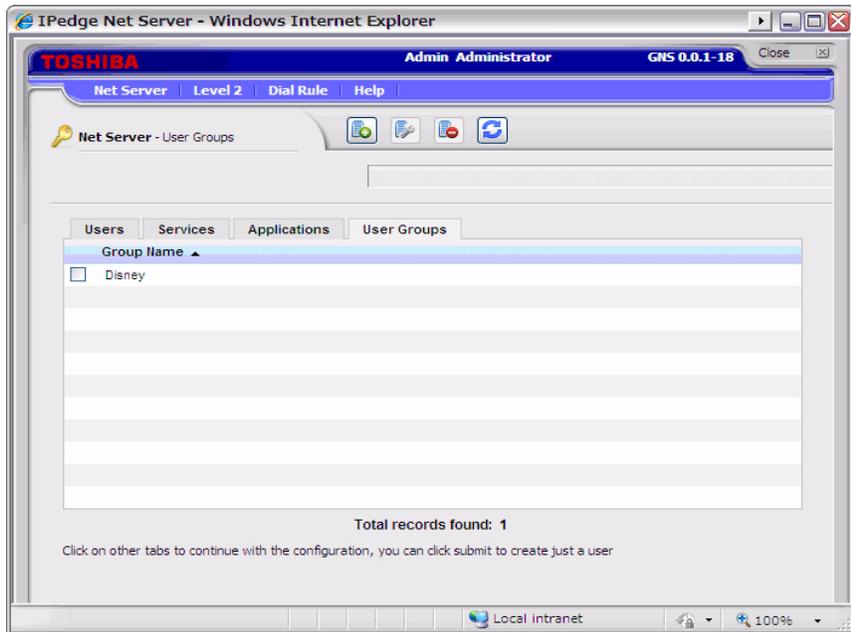
When you Add or Edit a checked entry, data can be entered from the following screen.



Field	Description
Application Name	Name of the application
User or Group	Usually, the client name of the user is shown (see Clients). When it is set to <Default> (or leaving it blank) the settings for the Default User can be defined. It can be used to define the settings of typical users while any additional clients that need settings other than those of the Default User can be defined separately. Each user can be assigned to a group by setting this number (application may use this to standardize settings/features for each group).
Read Level	This defines the access privileges for being able to read information about the application. The settings are Denied, Self, Group, or World.
Modify Level	This defines the access privileges for being able to modify the information about the application. The settings are Denied, Self, Group, or World.
License Mode	Specify the license that users in the group should use: Local – Use Advanced or Standard license specified during the installation. Advanced – Use Advanced license. Standard – Use Standard license. Auto – Try Advanced license first, and if not available, try standard license.
Setting #2	Reserved for future use.
COS	Define a COS number. These options are used to control the user access privileges. COS ranges from 0 to 63 is the sum of values assigned to each privilege shown below.
Server Admin Privilege	Enables the user to do administration of server configuration files. (value: 1)

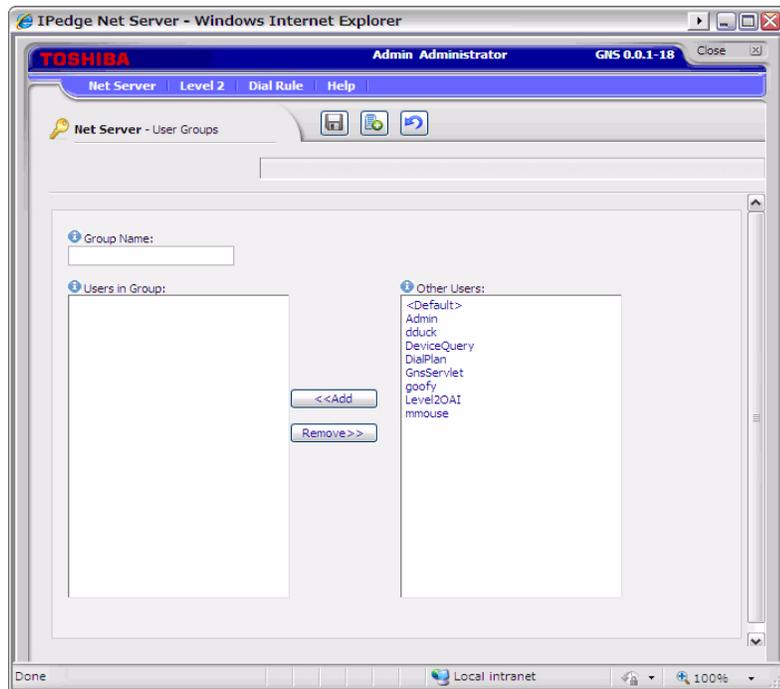
Field	Description
Use Server-based Configuration	When enabled, user will get the program configuration settings from the server specified by application files. If this is disabled, the user will get configuration settings from the local PC. (value: 2)
Group Admin Privilege#1/2	Determines if this user can perform functions for the group (unique to each application). (value: 4/8)
Other App Privilege#1/2	Determines if this user can perform other functions (unique to each application). (value: 16/32)

User Groups Tab User Groups tab defines the group of users to apply the common settings to multiple users.



When you Add or Edit a checked entry, data can be entered from the following screen.

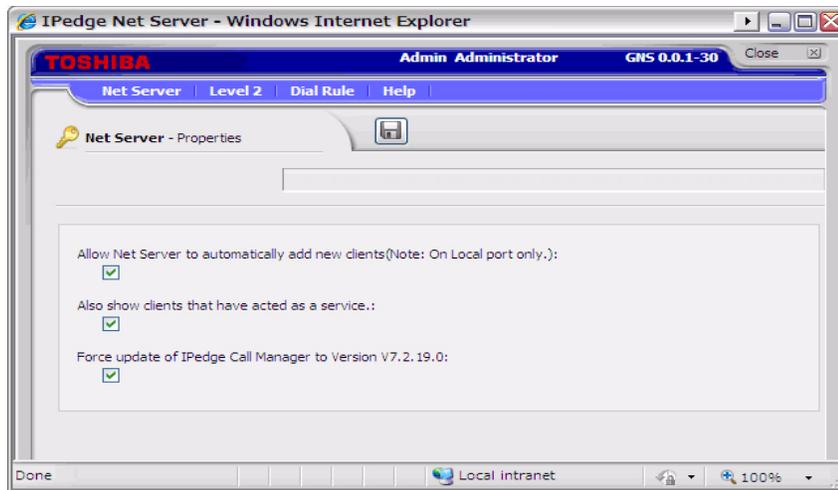
For an example refer to ["Create User Groups"](#) on page -22



Field	Description
Group Name	Name of the group
Users in Group	List of users that are currently included in the group. A user can be removed from the group by selecting the user and clicking Remove.
Other users	List of users that are not currently in the group. A user can be added by electing the user and clicking Add.

Properties Tab

Properties tab is used to configure the Net Server.

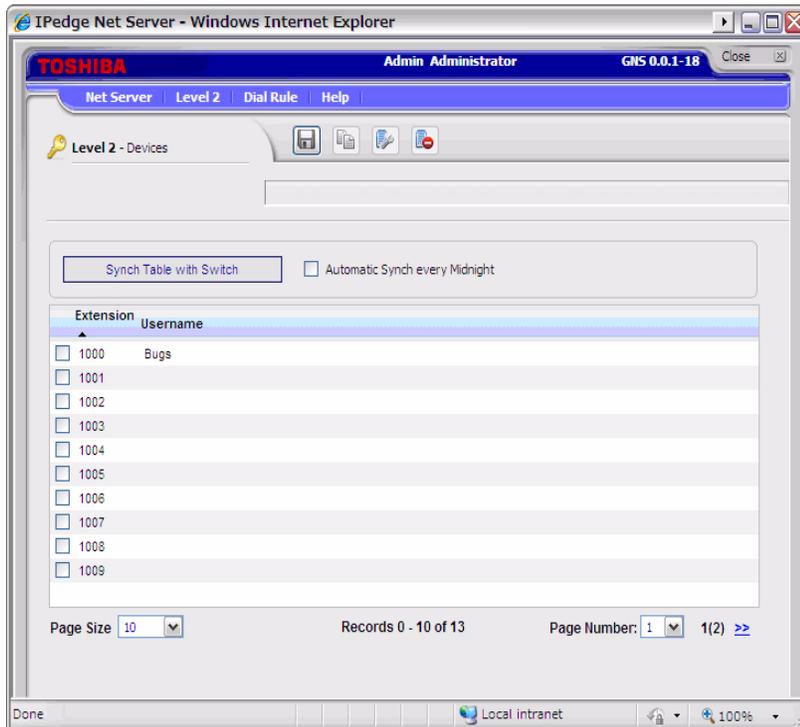


Item	Description
<p>Allow Net Server to automatically add new clients (Note: On local port only)</p>	<p>Check this to automatically add users when they connect to the Net Server first time. It is primarily intended to allow Call Manager users to create a user name and password in the system when they login the first time. The user will take on the default parameters for a user of that application.</p> <p>Do not enable this option if the administrator should control the access for each user, this option should not be enabled. To manually create or modify users go to the "Clients Tab".</p>
<p>Also show clients that have acted as a service</p>	<p>Control whether to show a component that is acting as a server in the client list.</p> <p>When checked, the Net Server Administrator / Users tab will show the main services running like Dial Plan, Level2OAI. When un-checked, it only shows the Call Manager Users, and Admin Accounts.</p>
<p>Force update of IPedge Call Manager to Version Vx.x.x.x</p>	<p>Whether to upgrade the Call Manager installed on the client with the one in the server. Version shows the actual version number of the Call manager on the server. Please see Server Based Call Manager Upgrade section.</p>

LEVEL 2 MENU Level2 menu allows the administrator to configure various items managed by Level2 which processes the Computer Telephony Integration with the IPedge system.



Devices Menu Device menu manages the device table which provides an Extension Directory for Call Manager.



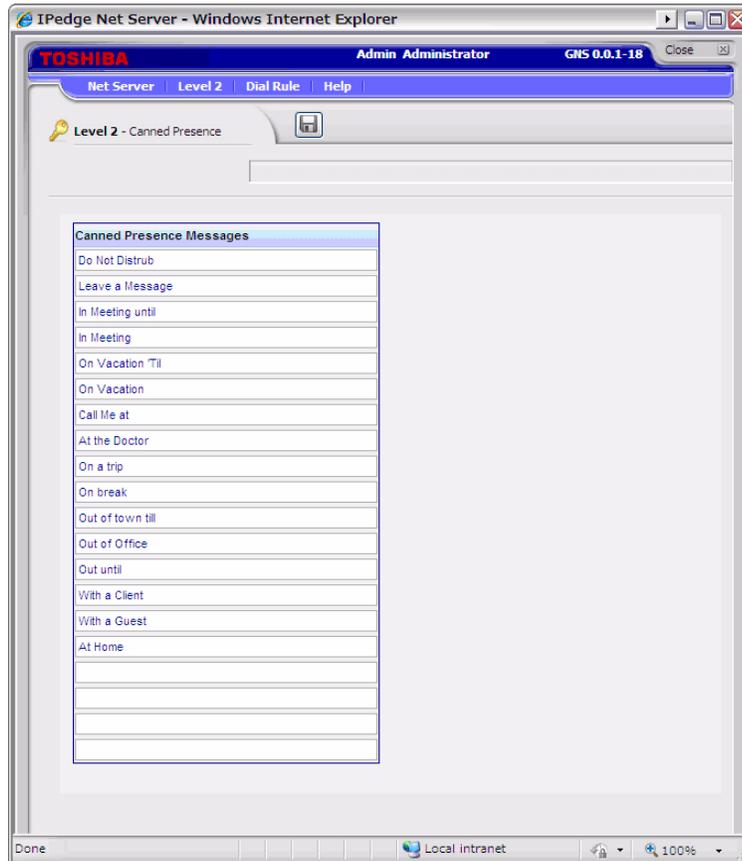
Device Table

Device table can be created manually by creating or copying an entry, or it can be automatically populated by using Synch Table with Switch.

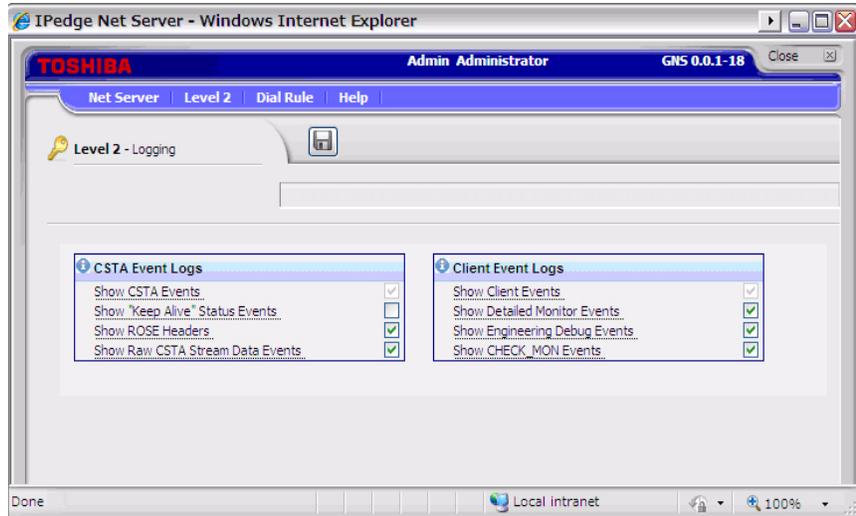
It is also possible to automatically update every midnight by checking Automatic Synch Every Midnight check box.

Canned Presence (Message)

Canned Presence (Message) menu enables the administrator to define messages used by Call manager for the additional information on the presence status. System standard default messages are defined, and the administrator can change them. Twenty different messages are possible.

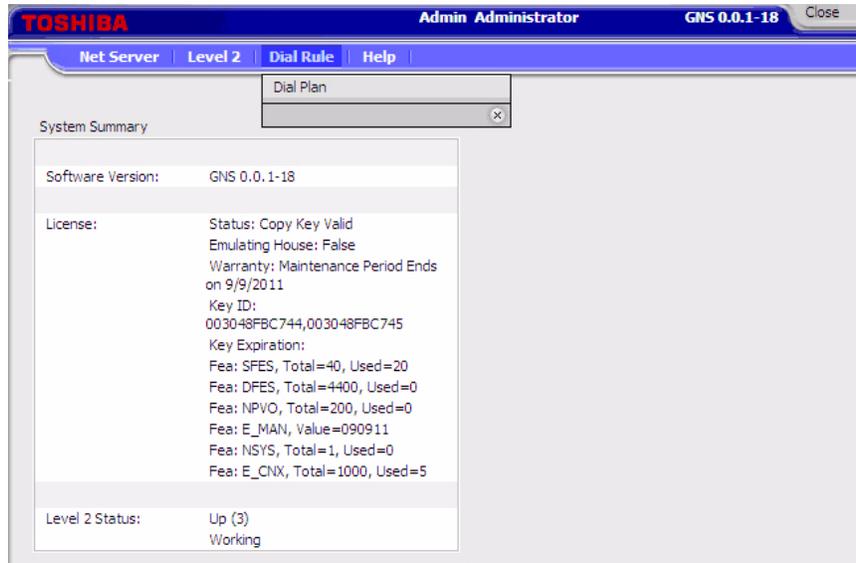


Logging Logging menu can control the level of trace information for the problem investigation. All items are checked by default and do not have to be changed unless instructed to so by Toshiba Technical Support.



Dial Rule Menu Dial Rule Menu allows the administrator to define the dialing rule to be applied automatically when the application such as Call Manager makes a call.

Dial Plan Dial Plan sub menu defines how the system interprets the dialing string. When the Use SERVER Dial Plan is checked in the Preference in Call Manager, dialing digits from Call Manager are interpreted based on the rule defined in the Dial Plan.



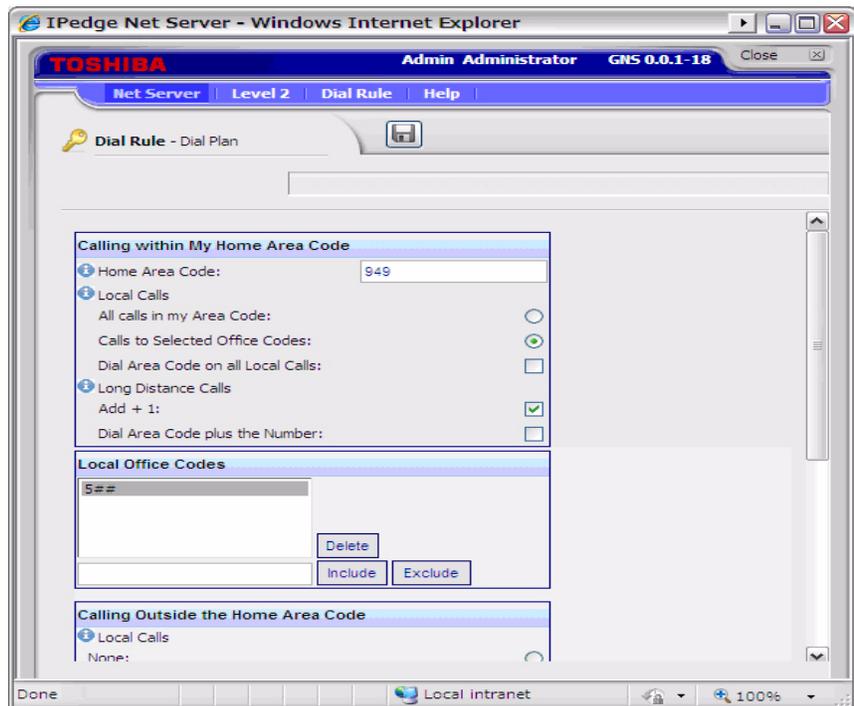
Each area of the US uses a different set of rules for determining which calls are local or long distance calls. The opening pages of your phone book are a good source for how to dial different numbers in your area. Your System Administrator will also need to define access codes for reaching outside lines. These pages generally define how to dial different areas and provide a listing of prefix codes for the local calling areas.

Three typical examples are:

- Phoenix, AZ – all calls within the “602”, “480”, and “623” area codes are considered to be local calls, while all calls outside those area codes are considered long distance.
- Santa Fe, NM – calls to some office codes within the “505” area code are considered to be local calls, while other calls to the “505” area code are considered long distance.
- Atlanta, GA – all calls to area codes “770” are considered to be local calls while some calls to the “404” and “678” area codes are also considered to be local calls.

Calling Within My Home Area Code

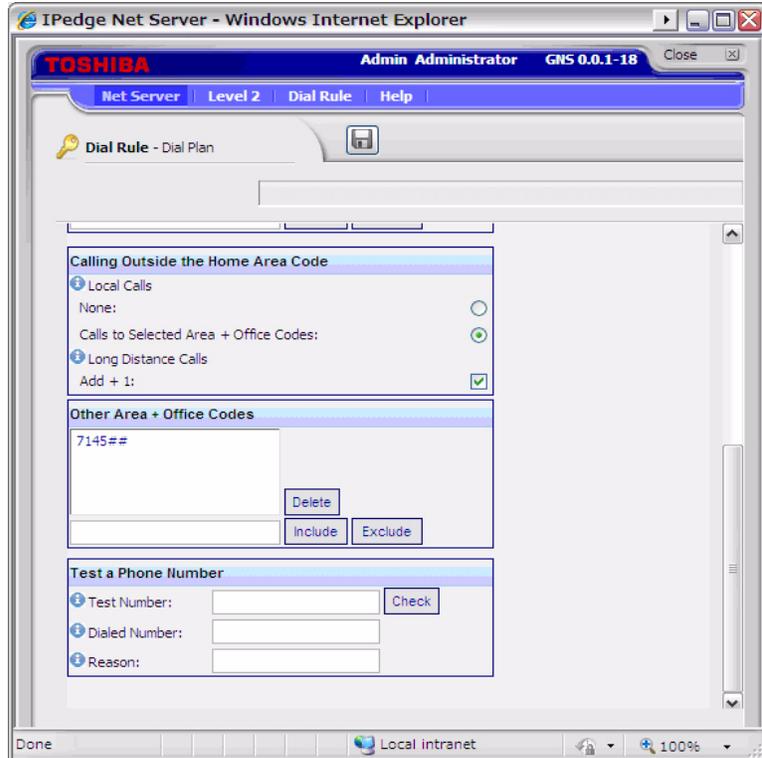
- Home Area Code – Set this to the Area code where the phone is located. This will be used by Call Manager to determine which dialed calls are within your home area code and when searching a contact manager (reverse screen-pop) the dialed number will need the area code included, i.e. Microsoft Outlook.
- All calls in my Area Code – Select All Calls in my Area Code if all calls with the same area code can be considered as local calls.
- Calls to Selected Office Codes – Select Calls to Selected Office Codes when only certain office codes in the same area code are considered to be local calls. If this option is selected, the following office code entry screen is displayed.
 - To Add Local Prefix Codes – Enter the prefix code and click Include. The wild card character # can be entered at the end of a prefix code entry to represent a range of codes. For example, 75# would represent all codes 750 to 759; and 7## would represent codes 700 to 799. If certain numbers need to be excluded from the wild card range, specify the number and click Exclude.
 - To Delete Local Prefix Codes – Highlight a prefix entry and click Delete. The delete button removes the entire entry from the list, therefore if the entry has a wild card, then it removes all codes represented by the wild card.
- Dial Area Code on Local Calls – Enable this feature in areas such as Atlanta, where full 10 digit number must always be used (include the area code) even when the call is local. Most areas of the US, local calls do not include the area code and dial only 7 digit numbers for local calls. Any number dialed from another program or hot key dialing will be down to its base 7 digits by removing the Home Area Code before it is dialed.



- Add+1 – Check the box if you need to dial a leading 1 before the number for calls within your Home Area Code.
- Dial Area Code Plus the Number – Check the box when the home area code is also to be dialed.

Calling Outside the Home Area Code

- Local calls
 - Select None when a different area code is always a long distance call.
 - Select Calls to Selected Area+Office codes when certain area codes are considered to be the local call area. If this is selected, the following area code entry screen is displayed.
 - To Add Local Area+Prefix Codes – Enter the six digit area+prefix code, then click Add. The wild card character # can be entered at the end of a prefix code entry to represent a range of codes. For example, 602### would represent all prefix codes in area code 602. If certain numbers need to be excluded from the wild card range, enter the number and click Exclude.
 - To Delete Local Area+Prefix Codes – Highlight a prefix entry, then click Delete. The delete button removes the entire entry from the list, therefore if the entry has a wild card, then it removes all codes represented by the wild card.



- For Long Distance Calls add +1 – Check the box when you need to have a leading one (1) added when making long distance calls outside your home area code.
- Click Save when done.

Test a Phone Number

Test a Phone Number – Dialing plans can become complex. Use these boxes to enter different telephone numbers and check to see the number that will be dialed. The dialed number should be identical to what you need to dial when using your phone to manually dial.

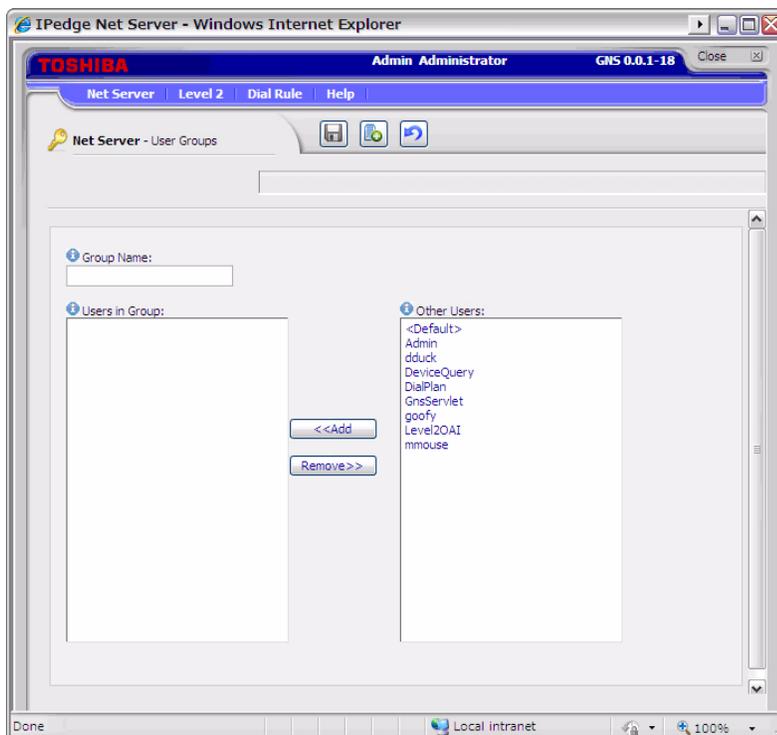
Server Based Call Manager Configuration

Creating a Server-based Class of Service for Call Manager begins in the group creation of Net Server administration, followed by creating your configuration on the Call Manager Admin, then publishing the configuration files to the Net Server.

The steps below show an example of creating two user groups, users and administrators, and assigning a class of service to each. Multiple groups can be assigned, each with its own configuration created by the Administrator common to that group.

Create User Groups

1. Use Net Server > Setup and click User Groups tab.
2. Click Add button
3. Type in a group name to represent the Call Manager administrator (CallManager Admin in this example) and click Save.

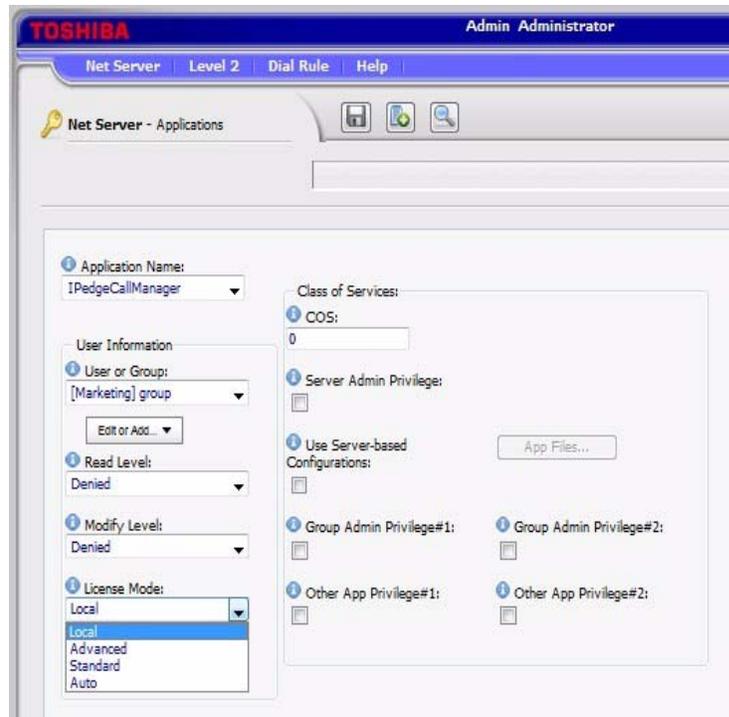


4. Click Add button again, and this time, type in a name to represent the Call Manager Users' group (Call Manager User in this example).
5. Repeat above steps for other groups if necessary.

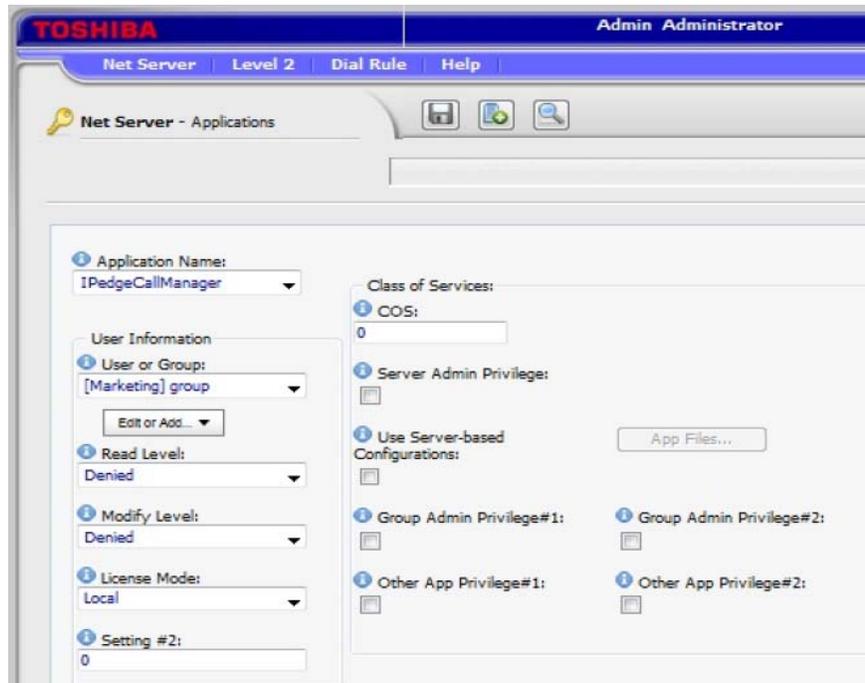
Assign Users to Call Manager Application

By assigning Groups to the Call manager application enables you to assign a common “Class of Service” and “Configurations” for all users in a group. Individuals that are not part of a group can also be assigned as a Call Manager application user.

1. Select the Applications tab, and click Add icon.
2. Select the Call Manager in Application Name drop down.
3. Select the administrator group (ex. Call Manager Admin) from the drop down menu for User or Group.
4. Select World for both Read Level and Modify Level from their respective drop-down boxes.
5. Place a checkmark in the Server Admin Privilege checkbox.
6. Select the License Mode.
7. Click Save icon.



8. Click Add icon.
9. Select the Call Manager in Application Name drop down.
10. Select the Call Manager User Group created previously from the User or Group drop-down box.
11. Select Denied for both the Read Level and Modify Level from their respective drop-down boxes.
12. Uncheck the Server Admin Privilege checkbox.
13. Select the License Mode.
14. Place a checkmark in the Use Server-based Configurations checkbox.
15. Click Save icon.



16. Repeat the preceding steps to add any remaining Call Manager user groups.
17. Default in User or Group can be used to setup the default settings for all users that are not included in any group or individual.
18. To exclude certain users from the Default, choose an individual user.

Assign Users to User Groups

To Assign Users as Call Manager Administrators

1. Use Net Server menu > Setup, then Users tab.
2. Check the user who needs to be a Call manager administrator and click Edit icon.
3. Place a checkmark in both the Admin and Users groups as is shown in the screen below.
4. Click Save icon.
5. Repeat for other Call Manager users to be assigned as Administrators.

The screenshot displays the IPedge Net Server web interface in a Windows Internet Explorer browser window. The page title is "Net Server - Users". The user being configured is "Admin". The configuration fields are as follows:

User Name:	Admin	Password:	•••••
Extension:		Service Access:	0
Logins:	0	Consecutive Login Failures:	0
Login Failures:	0	Last Login Failed On:	
Change Password:	No	Allow to be Remote:	No
Group Membership:	<input type="checkbox"/> Disney <input checked="" type="checkbox"/> User Group <input checked="" type="checkbox"/> Admin Group		

The browser window shows the URL "Local intranet" and a zoom level of 100%.

To assign Users as Call manager Users

1. Check the user who is a Call Manager user and click Edit icon.
2. Place a checkmark in the User group only as is shown in the following screen:
3. Click Save icon.
4. Repeat for other Call Manager users to be assigned as Users.

The screenshot displays the 'Net Server - Users' configuration page in a web browser. The page title is 'TOSHIBA Admin Administrator GNS 0.0.1-18'. The navigation menu includes 'Net Server', 'Level 2', 'Dial Rule', and 'Help'. The main content area shows the configuration for a user named 'User 2002'. The fields are as follows:

User Name:	User 2002	Password:	•••••
Extension:	2002	Service Access:	0
Logins:	6	Consecutive Login Failures:	0
Login Failures:	0	Last Login Failed On:	
Change Password:	No	Allow to be Remote:	No
Group Membership:	<input type="checkbox"/> Disney <input checked="" type="checkbox"/> User Group <input type="checkbox"/> Admin Group		

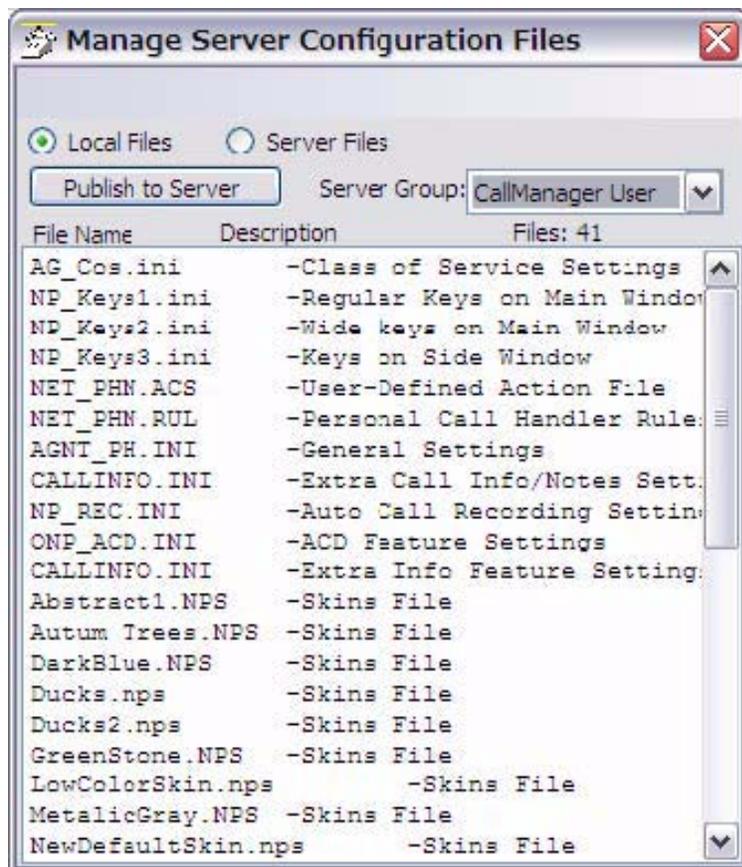
The browser's status bar at the bottom shows 'Done' and 'Local intranet'.

Create Configuration Files using Admin Call Manager

1. Restart the Administrator's Call manager if it is running
2. Set up the buttons, Call Handler rules, skins, etc. as you would like the users' Call Manager to be configured. Use the Call Manager User's Guide as needed for how to configure Call Manager. To access the user guide click on the SCM button in the Call Manager banner and select **Help**.

To Change the COS Configuration

1. Once the configuration is done, using Call Manager, select Tools > Publish.
2. Select the Server Group: Call manager User (the group created in Net Server).



3. Left-click on the file name "AG_COS.INI" to highlight it.
4. Right-click on the highlighted file and choose Edit. The following window is shown. Change each value from =Y to =N that should be set and controlled from the Server. Any items left using the =Y setting will allow the user to change and keep those settings on that local PC. The file from the server will not be downloaded.
5. Click File > Save to save the changes. Close the "AG_COS.INI" file.



```
AG_COS.INI - Notepad
File Edit Format View Help
[[cos]
Chg_Actions=Y
Chg_Rules=Y
Chg_StdKeys=Y
Chg_PgmKeys=Y
Chg_BotKeys=Y
Chg_MainSet=Y
Chg_OutLookSet=Y
Chg_Tnf0Set=Y
Chg_Recording=Y
Chg_ACD=Y
Chg_ACD_Viewer=Y
ShowMaintonSplash=N
Chg_AppKeys=Y
Chg_Docking=Y
UserExit=Y
Chg_Profiles=Y
Chg_XtraKeys1=Y
Chg_XtraKeys2=Y
Chg_XtraKeys3=Y
Chg_XtraKeys4=Y
Chg_XtraKeys5=Y
Chg_XtraKeys6=Y
Chg_XtraKeys7=Y
Chg_XtraKeys8=Y
Chg_XtraKeys0=Y
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Server Based Call Manager Upgrade

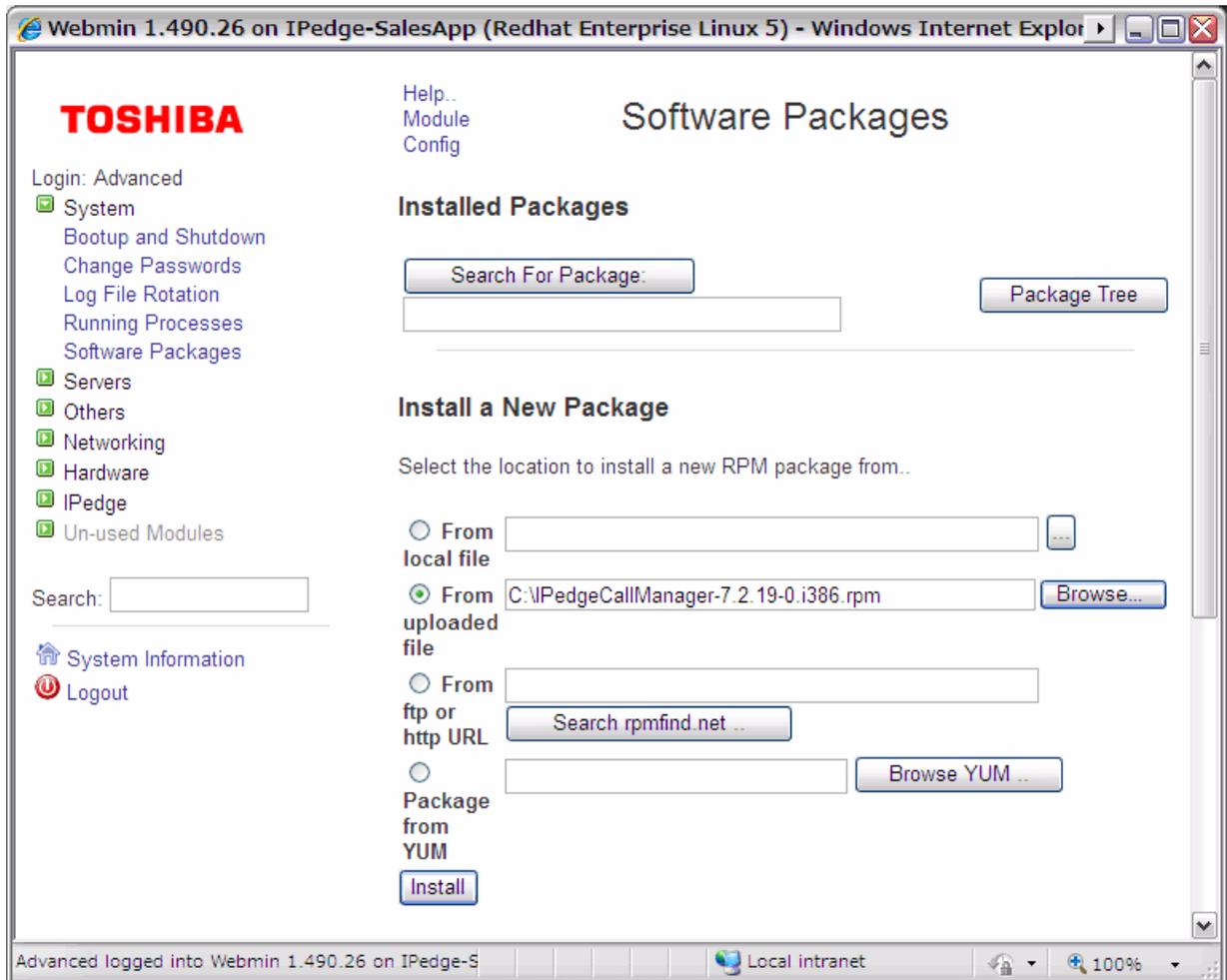
When the new Call Manager is released, it is possible to install the upgrade on the server so that it can be downloaded to the client. If the server based upgrade is configured, the Call Manager user will be prompted to upgrade the software when the Call Manager is launched.

The steps below show how to install the Call Manager upgrade to the server and how to configure the Net Server to upgrade the Call Manager client.

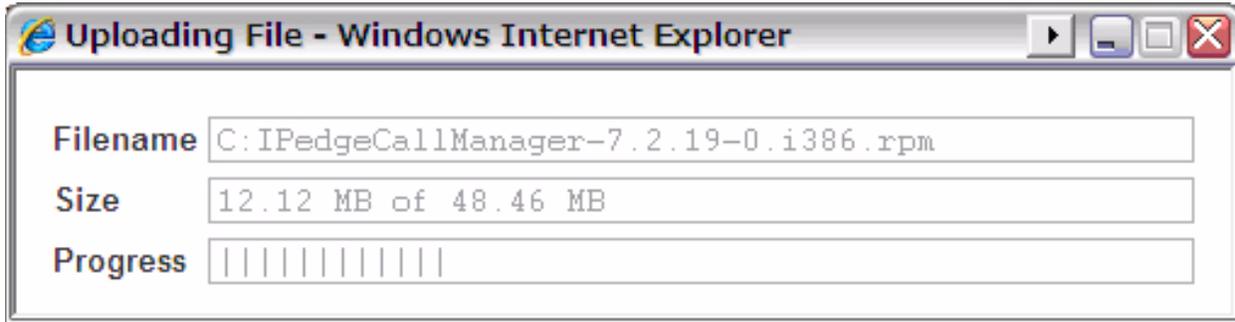
Installation

The Call Manager upgrade software is provided as an rpm file from Toshiba FYI, and it needs to be stored in the PC that can connect to IPedge through Webmin from Enterprise Manager.

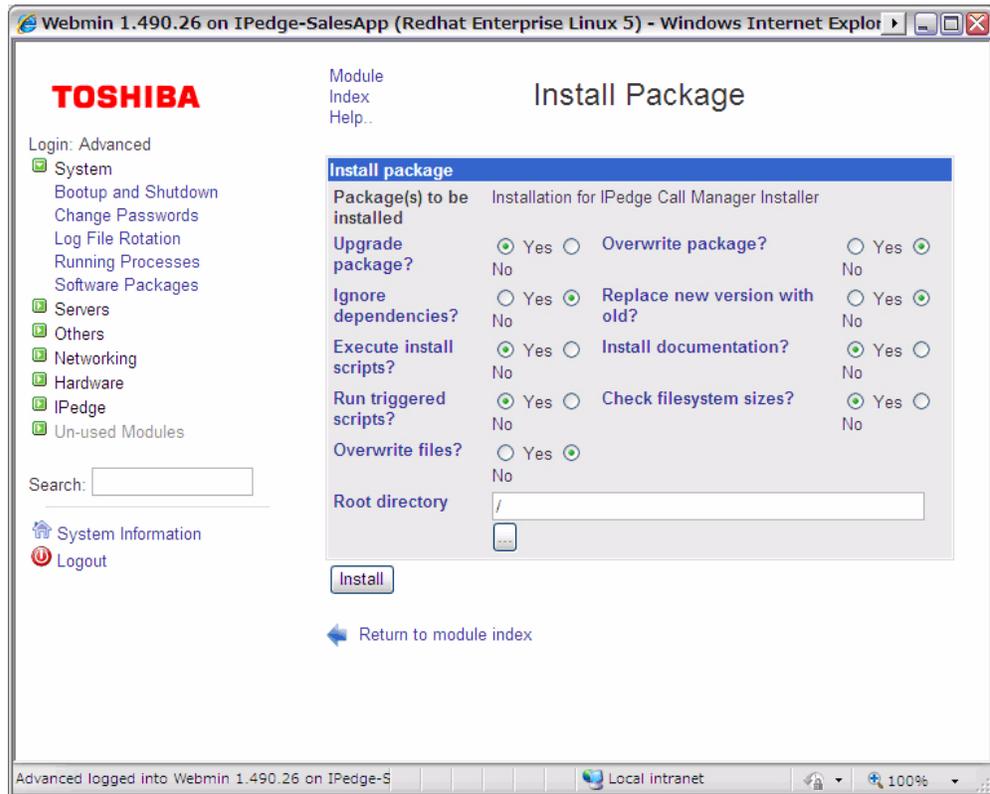
From the PC, launch Enterprise Manager and run Webmin. In the Webmin, select Software Packages menu under System menu. Then, select From uploaded file, and click Browse to specify the Call Manager upgrade software file. Then click Install.



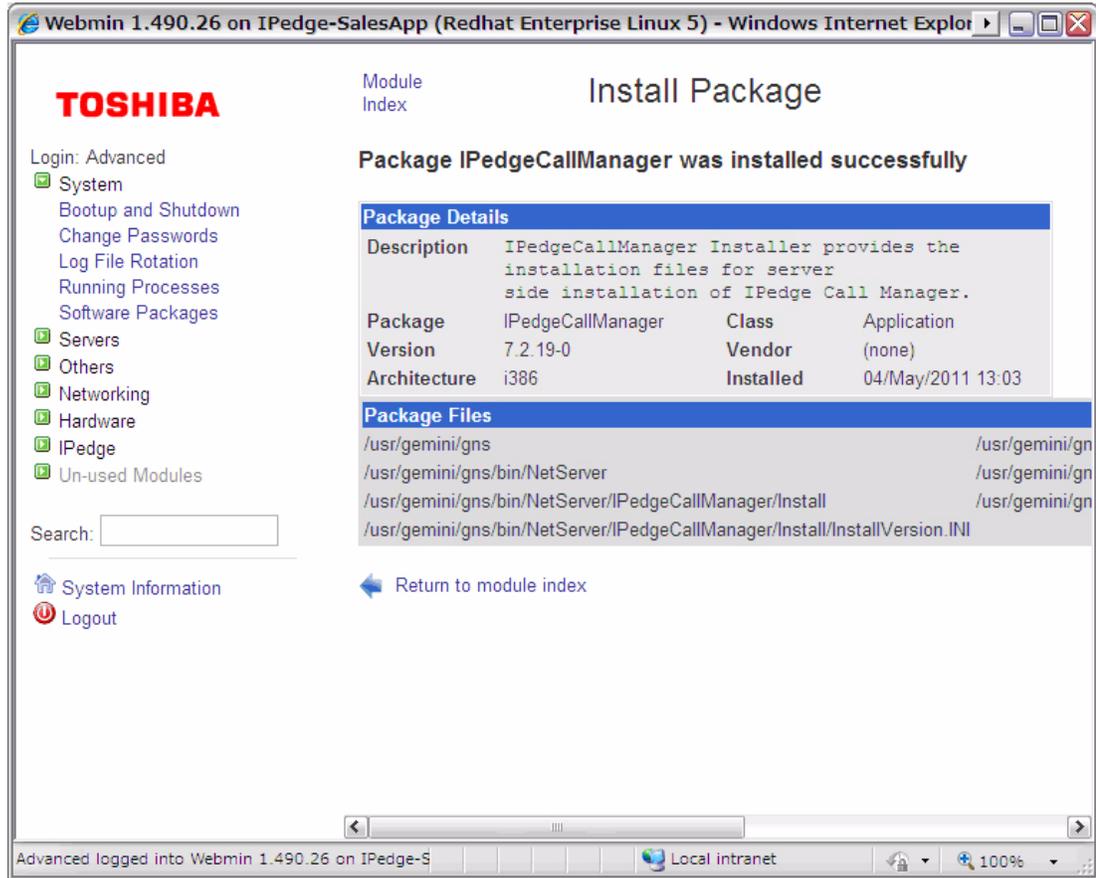
After clicking install, the following progress bar is shown to indicate the progress of the file upload to the server.



When the upload is completed, the following screen displays. Please use the default value for all the settings. Click Install to start installing the Call Manager software upgrade to the server.



After the successful installation, the following screen will be shown. Then the user starts the Call Manager next time, the user will be prompted to install the newer version. The user can proceed or cancel the upgrade.



Net Server configuration

After the upgrade software is installed on the server, the administrator can choose whether to enable or disable the Server Based Call Manager upgrade.

In the Net Server admin screen, select Properties menu from Net Server tab. Then, check "Force update of IPedge Call Manager to version V7.2.19.0" and click Save to enable the Server Based Call Manager upgrade. To disable the Server Based Call Manager upgrade, deselect it and click Save. Note that the version number is the actual Call Manager version installed on the IPedge server.

CAPACITY --

AVAILABILITY --

RESTRICTION --

HARDWARE

No additional hardware is necessary for this feature.