

**Aspire Advanced Software Solutions &
Integration (2005)**

OPTIMUS

System Manual

Revision 1.1

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Scope

The purpose of this manual is to provide a complete and comprehensive guide as to how the Optimus Call Center for LG-Nortel product works, its configuration and settings, and explain the product's features.

Optimus Call Center is a Call Center software designed to work closely and integrate with LG-Nortel PBXs. Many of Optimus' features depend on correct configuration of the PBX, and this should be done in compliance with the LGN PBX configuration guide (see Appendix A of this manual).

The manual describes all features available in the software, and explains the main concept of a Call Center – calls, queues and agents. For a short guide on configuring a simple call center once Optimus has been installed, please refer to Appendix B – the Optimus QuickStart Guide.

This Optimus System Manual refers to Optimus version 0.20 and no other prior or later versions. For other versions please refer to the correct System Manual.

Clarification: All male-oriented references in this document are intended for both male and female readers and users.

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Concepts and Abbreviations

- **Optimus Server:** The PC server where Optimus Call Center is installed, using Microsoft Windows 2000/2003 Server OS software.
- **TAPI:** Telephony API (Application Programming Interface): telephony protocol supplied by Microsoft as part of the Windows OS and used by PBX vendors for application access.
- **TSP / TAPI Server:** TAPI Service Provider: The software developed by the PBX vendor using the TAPI protocol, to enable application access to the PBX. For Optimus, the LGN TSP is installed on the Optimus Server.
- **Optimus Main Device (OMD):** Optimus uses a smart LG-Nortel extension to handle waiting calls. This extension should be an LDP-30 telephone device, and DSS units are added as needed for call center with more than one PRI (or E1) interfaces.
- **Smart Extension:** An extension of the PBX supporting a smart, digital phone set. A smart extension has many features available through the PBX, which a regular extension does not.
- **Regular Extension:** An extension of the PBX supporting a regular, analog phone set. A regular extension usually supports only simple telephony functions, not unlike a traditional home telephone.
- **DSS:** An extension of a smart telephone set, providing more buttons and allowing the set to handle more calls simultaneously.
- **TN:** A unique, physical identification of an extension in the PBX.
- **CLAN:** Customer LAN. The main local network of the customer.
- **PLAN:** PBX LAN. A network segment where the LGN PBX and the Optimus Server are located. See Optimus Architecture diagram (Appendix A) for more details.
- **PBX:** Private Branch Exchange.
- **IP Address:** TCP/IP network protocol assigns a unique IP (Internet Protocol) address for each computer or device (such as the PBX).
- **IP Port Number:** TCP/IP network protocol uses different port numbers for different types of communications. For example, the HTTP protocol used for web browsing uses TCP/IP port 80, the SMTP protocol for email transfer uses port 25, and so forth.
- **DNIS:** Dialed Number Identification Service, provided for each call and designates the number that was dialed in order to reach the call's destination.

- **CLID / ANI:** Caller ID, provided for each call and identifies the caller's number (unless the number is blocked purposefully).
- **ATTACHDATA:** Any additional data (besides DNIS and CLID) attached to the call. For example: Customer ID as entered by the caller using the phone's buttons.
- **SPIN:** Screen Pop-up Integration. An Aspire product used for tight and closer integration, used mainly for Client/Server software.
- **ODBC:** Open Data Base Connectivity – a MS-Windows standard for database access and connections. Supported by most commercial database software.

1. Configuration

The manual follows the menus of the Optimus web management tool, available on any PC connected to the Optimus Server. All directions in the manual ("Go to Configuration, Optimus Main Parameters") refer to the web management tool's menus.

Open Microsoft Internet Explorer and type the following URL in the address bar:

[http://\[OPTIMUS_SERVER_MACHINE_NAME\]/Optimus/index.htm](http://[OPTIMUS_SERVER_MACHINE_NAME]/Optimus/index.htm)

Where [OPTIMUS_SERVER_MACHINE_NAME] is the machine name or IP address where the Optimus is installed.

In the login screen the username is *admin* and the password is *1234*. This is the default user installed with the Optimus – Do not Change it.

Optimus Main Parameters

Go to *Configuration, Optimus Main Parameters*

1.1.1. Internal CLID Number of Digits

The maximal number of digits an internal extension of the PBX can have and be identified by.

1.1.2. Default Optimus GUI Language

Default system language for the user interface. Please note that it is possible to define different languages for specific agents (see agent configuration) but the default system language will always be used in the Login Screen and in other instances where agent-specific languages is not applicable.

To add another language use the *Optimus Multi Language* application, installed on the Optimus Server. Any changes made using this tool reflect immediately in the GUI (although some changes require the users to log out from the Optimus Management System and re-login in order for them to take effect).

1.1.3. System Mode

This value determines the trace level of the server. Available options are:

- Production – Only critical errors are logged. This is the default setting to be used usually.
- Debug – Both critical errors and some system messages are logged. To be used by product's vendor request only.
- Full Debug – Critical errors and all the messages are logged. To be used by product's vendor request only.

Optimus log files include:

- C:\windows\system32\optimus.log
- C:\windows\system32\resources.log
- C:\windows\system32\optimusbackup.log
- C:\windows\system32\optimuswatchdog.log

- C:\optimus\optimusweb.log
- C:\optimusWS\optimusWS.log
- C:\optimus.txt

1.1.4. Optimus Server CLAN IP Address

The IP Address of the Optimus server in the customer's LAN. This value should be set during Optimus installation, *and should not be confused with the IP Address in the PBX LAN.*

Changes made to this value require Optimus services restart.

1.1.5. Optimus Server CLAN IP Port Number

Optimus' GUI and various services use this IP port number to communicate with the Optimus server. If a Firewall or IP filtering software are located between the Optimus server and the agents' PCs, this port should be opened in the Firewall.

Changes made to this value require Optimus services restart.

1.1.6. LG-Nortel PBX Model

The customers' LG-Nortel PBX model (e.g. LDK 100, LDK 300, iPECS). Default value for PBXs not specified in the combo box is LDK100.

1.1.7. Optimus Client Architecture

This value affects the agent toolbar work method. Available options are:

- LAN (Local Area Network) – When the agents logs in Optimus assigns them automatically to the extension set in the Agent Extensions according to the PC address (Host Address or IP Address) they log in from.
- Terminal Server – When the agents log in they are also prompted to specify an extension number for the phone set they are using.

Changes made to this value require Optimus services restart.

1.1.8. Available History (months)

The number of months Optimus keeps historical data for. Any data older than the selected value is deleted from the database.

1.2. Routing

Go to *Configuration, Routing*

1.2.1. Main System Default Number

The Main System Default Number is where calls are routed in several cases:

- When no agents are logged into Optimus.
- When faulty routing rules cause infinite loops.
- In other cases where Optimus does not have information as to where the call should be routed.

1.2.2. Agent Select Algorithm

When Optimus has to choose an available agent to route the call to (if more than one are available), it will use one of several algorithms to choose that agent. The available options are:

- Most Recently Used (MRU) – The agent who last held an ACD call.
- Least Recently Used (LRU) – The agent who is idle for the longest time.
- Random

1.3. Real Time

Go to *Configuration, Real Time*

1.3.1. Supervisor Real Time Update Interval (seconds)

This value determines the frequency in which the information displayed on the real time screens will be refreshed.

1.3.2. Real Time Cumulative Interval (minutes)

Each field in the real time views has a defined data type of Cumulative or State.

- Cumulative - The statistics are accumulated over a specified period of time (for example, the number of calls answered during an interval). This value determines the length of the period of time.
- State - The value depends on the instantaneous state of the system (for example, the state of an agent at a given time or the number of waiting calls *right now*).

1.4. Screen Pop-up

Go to *Configuration, Screen Pop-up*

1.4.1. URL to Pop-up

Optimus usually pops up a browser screen with a specified URL, including several call parameters. In this method and using MS-Windows and browser features, Optimus can pop up web-based software, open miscellaneous files (text files, office documents and so forth) and even execute other applications.

By changing this value Optimus can integrate with any other application and can pop up not only the Optimus built-in screen but any other screen. The URL can contain any of the available System Parameters (CLID – Caller Identification, DNIS – Dialed Number Identification Service and ATTACHDATA)

Another method for screen pop up integration is available and applicable only for C/S (Client / Server) software using an ACTIVEX component. For more information see Aspires' SPIN documentation.

1.4.2. Parameters to Pop-up

As stated in the previous section, information regarding the call can be transferred during screen pop-up to the "popped" application. Use this tool to specify which parameters will be transferred.

1.5. Agent Toolbar Configuration

Go to *Configuration, Agent Toolbar Configuration*

1.5.1. Enable Real Time Viewing for Agent

Check this box to enable your Optimus agents to observe real time information in their agent toolbars. Agents will be able to view only real time information relevant to the queues they are part of.

1.5.2. Enable Screen Pop-up

Check this box to enable screen pop-ups.

1.5.3. Change Status to "Force not Ready" when Agent Doesn't Answer Calls

Optimus will transfer calls to agents as long as their status is set to "Ready". If the agent fails to answer the call, although they are available and ready, Optimus can change the agent's status automatically to "Force not Ready", thus informing the supervisor of this event. Enabling this feature is done using this checkbox.

Calls returning from an agent to the queue in this event are listed as *returned* calls in the real time displays and historical reports, thus distinguishing them from the regular *offered* calls.

1.5.4. Perform Automatic Log Off When Browser Screen Closes

Check this box if you wish Optimus to automatically log off agents closing their agent toolbar.

1.5.5. Agent Toolbar IP Port Number

The port number which is used by the agent toolbar to interact (send and receive agent state information and real time data) with the Optimus server.

1.5.6. Agent Toolbar Update Interval (seconds)

Refresh rate of the agent real time data, in seconds.

1.6. Break Types

Go to *Configuration, Break Types*

When agents set their status to *Not Ready* they must also select an Activity or Break Type – The reason they are not ready. Optimus arrives with a built-in list of activities (such as Break, Wrap Up, Training, etc.) but any other activity or break type can be added. This feature is most useful for creating different types of breaks or for recording Backoffice and paperwork activities as part of the agent's call center job.

1.6.1. Description

Description of the activity, to be displayed in the agent toolbar and historical reports.

2. PBX & Devices

2.1. Optimus Main Devices

Go to *PBX & Devices, Optimus Main Devices*

Optimus uses a smart LG-Nortel extension to handle waiting calls. This extension (hereinafter: *Optimus Main Device* or *OMD*) should be an LDP-30 telephone device, and DSS units are added as needed for call center with more than one PRI (or E1) interfaces. Define this extension here.

2.1.1. Extension TN

The Id of the OMD extension as displayed in the TAPI server.

2.1.2. Extension Number

The extension number - this is the OMD's DNIS (Dialed Number Identification Service) – the number that if dialed from an external source will reach the OMD.

2.1.3. Description

The OMD's description.

2.2. Incoming Calls DNISs

Go to *PBX & Devices, Incoming Calls DNISs*

Each incoming call to the PBX reaches it due to dialing a specific number – this is the call's DNIS, the number dialed in order to reach the PBX. All incoming calls DNISs handled by Optimus should be configured in this section.

2.2.1. Dialed Number

The DNIS

2.2.2. DNIS Description

A place to enter a description for this DNIS

2.2.3. Agent Greeting

When using Optimus' built-in pop-up screen, it is possible to assign a different greeting for any incoming DNIS.

2.3. Agent Workstations

Go to *PBX & Devices, Agent Workstations*

A workstation is a combination of a phone set and a computer where an agent can log in to Optimus and receive ACD calls. Optimus supports agent roaming to all extensions connected to your LG-Nortel PBX.

2.3.1. Extension TN

The Id of the extension as displayed in the TAPI server.

2.3.2. Extensions Number

The extension number – the number dialed in order to reach this extension.

2.3.3. Computer Name

The unique ID of the PC used by the agent in this extension. Optimus supports both Host Name and IP Address working methods.

2.3.4. Description

A free text which describes the workstation

3. Users & Agents

Go to *Users & Agents*

All Optimus users (Agents, Supervisors and Administrators) are listed here.

3.1. Username

Mandatory. A username is unique throughout the system and is up to 10 characters.

3.2. Password

Mandatory. Up to 10 characters

3.3. User Type

Mandatory. Available user types are Administrator, Supervisor and Agent:

- Administrator: can change and define Optimus configuration and settings, as well as all features available to the Supervisor and Agent-type users.
- Supervisor: can use Optimus' extensive real-time monitoring and historical reporting module, as well as all features available to the Agent-type user.
- Agent: can log into Optimus and receive call center calls. Can also use the agent toolbar feature.

3.4. Given Name

The given name of the user

3.5. Surname

The surname of the user

3.6. Comment

A free text to describe the user

4. Queues & Rules

4.1. Queues

Go to *Queues & Rules, Queues*

A queue is where waiting calls wait for an agent to become available and handle them. During waiting time in the queue, callers hear the waiting music from the PBX. Calls can overflow from one queue to another queue. Click on the *Attribute Groups* icon to assign Agent Groups (see below) to handle this queue.

4.1.1. Queue Name

The name of the queue

4.1.2. Is Default

Optimus uses a default queue for calls that do not fall under any known routing rule, or for calls that are trying to return (overflow) to a queue where they have already waited. In this checkbox, choose if this queue is Optimus' default queue. In one-queue configurations, the only queue is naturally also the default queue.

4.1.3. Wrap Up Time (seconds)

When an agent finishes an ACD call, Wrap-up Time is the number of seconds to wait before transferring another ACD call to this agent. This time is usually used to complete documentation of the call in the CRM.

4.1.4. Available Groups

A list of all the Agent Groups defined in Optimus. Assign an Agent Group to handle this queue by choosing the group and moving it from the left-hand side of the screen to the right-hand side (Queue's Groups).

4.1.5. Queue's Groups

In order to assign agents to handle a queue, administrators actually assign Agent Groups to the queue. An Agent Group is a collection of agents defined in Optimus (an unlimited number of groups is possible). When assigning an agent group to a queue, all the agents in that group are automatically available to handle calls for that queue.

4.2. Agent Groups

Go to *Queues & Rules, Agent Groups*

An Agent Group is a collection of agents, that for all purposes function as a single group. By using agent groups, supervisors can assign a whole group of agents to handle calls from a queue with a single action. An agent can be a member of an unlimited number of groups, and an unlimited number of agent groups are possible in Optimus. Click on the *Attribute Queues* icon to assign queues to this agent group, and on the *Attribute Agents* icon to assign agents to be part of this Agent Group.

4.2.1. Group Name

The name of the group

4.2.2. Available Queues

A list of all the queues defined in Optimus. Assign a queue to this agent group by choosing the queue and moving it from the left-hand side of the screen to the right-hand side (Group's Queues).

4.2.3. Group's Queues

All the queues this agent group is currently handling.

4.2.4. Available Agents

A list of all the agents defined in Optimus. Assign an agent to this agent group by choosing the agent and moving it from the left-hand side of the screen to the right-hand side (Group's Agents).

4.2.5. Group's Agents

All the agents that are members of this agent group

4.3. Routing Rules

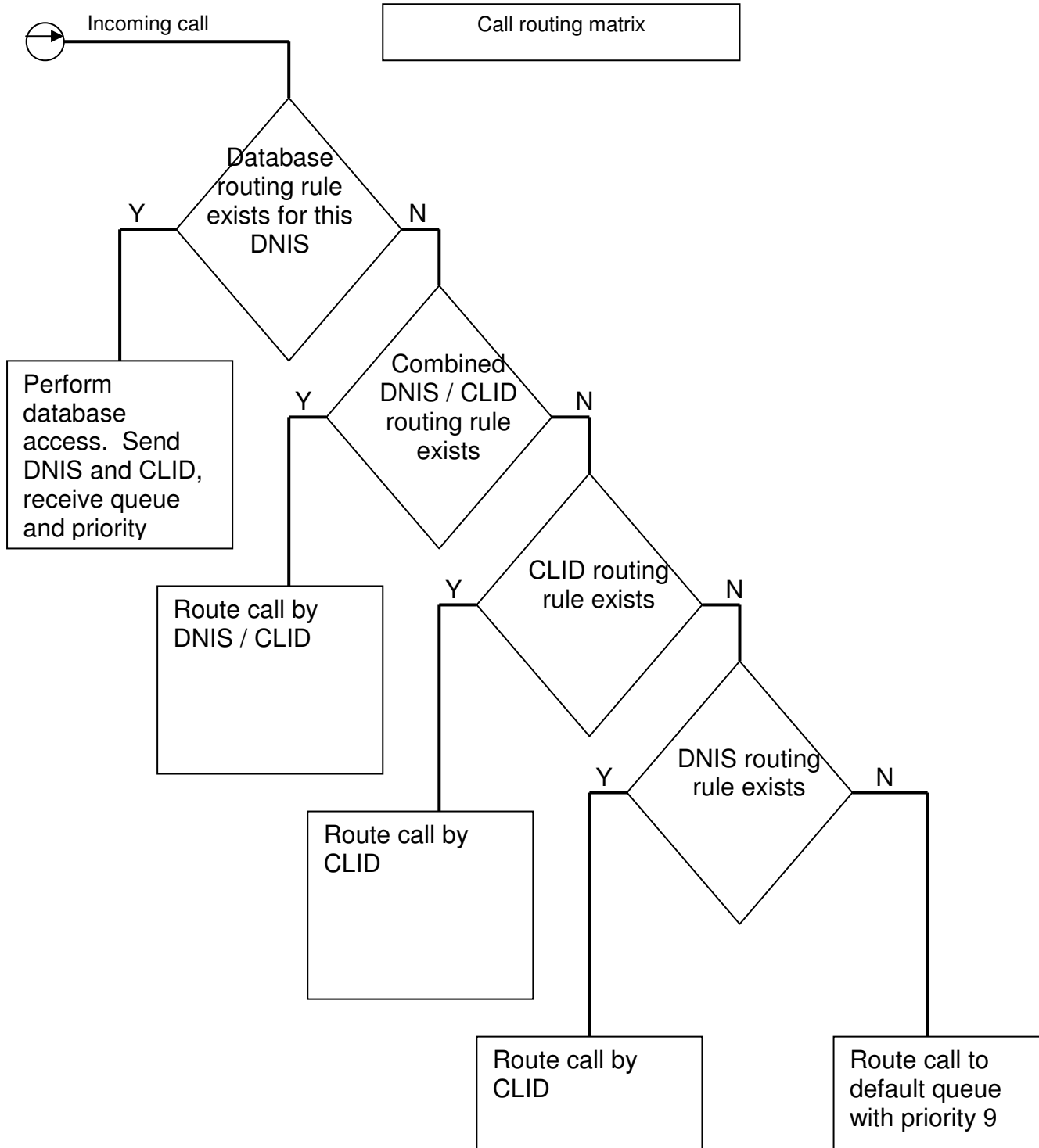
Optimus routes calls to queues (and, eventually, to agents) according to several possible types of routing rules:

- **Database Rule:** Optimus uses available information of the call (such as DNIS, CLID and information entered by the caller such as customer id or order number) to access external databases and receive queue and priority information from these databases.
- **DNIS Rule:** All calls that are incoming to a specific DNIS.
- **CLID Rule:** Calls from certain callers, according to their caller ID.
- **DNIS / CLID Rule:** A cross-checking of the DNIS and CLID rules.

For each incoming call, Optimus will look for a routing rule fitting that call. Once Optimus has found such a rule, the call will be routed. Since it is possible to define more than one rule that will fit a certain call (for example – a general DNIS rule and in addition a rule referring to a certain caller calling the same DNIS, assigning that caller higher priority), Optimus will look for fitting routing rules in this order:

- Database Rule
- DNIS / CLID Rule
- CLID Rule
- DNIS Rule

The routing rule decides not only the queue the call will be routed to, but also the priority this call receives in the queue (and in Optimus). Call priority can cause a call to bypass other calls already in the queue (if the call was assigned a higher priority, for example a VIP customer) or to wait longer than usual (a low priority call).



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4.3.1. Route by Database Rules

Go to *Queues & Rules, Routing Rules, Route by Database Rules*

Database routing rules are used to handle calls according to external information, which exists in databases of other software systems in the customers' organization, such as CRM software. For example, it is possible to route VIP callers to one queue, and other callers to another. Determining which caller is a VIP caller (according to their CLID) is of course not part of Optimus, but of the CRM database.

A database routing rule is a combination of DNIS and a Database connection. The call routing of every incoming call to the specified DNIS is determined based on the external database. Optimus executes a stored procedure or an SQL query on the customer database which returns the queue and the priority of the call.

It is important to understand, that in order to minimize database hits and load, a database routing rule is DNIS-dependant. i.e., only calls incoming to a certain DNIS will be querying the database. It is of course possible to define database rules for all DNISs.

In any case of a failure to access the database or to receive the expected response, Optimus will disregard the database routing rule and will move on to the next rule in the list.

4.3.1.1. Incoming Call DNIS

The DNIS the call came into. This DNIS must first be defined in *Incoming Calls DNISs*.

4.3.1.2. SQL Query Description

The SQL query to be performed in this routing rule. The query is defined in the *Database Connections* section.

4.3.2. Route by DNIS + CLID Rules

Go to *Queues & Rules, Routing Rules, Route by DNIS + CLID Rules*

A DNIS + CLID Rule is based on a combination of a specific DNIS and a specific CLID. An incoming call must match both DNIS and CLID to be routed according to this rule.

The Route by DNIS + CLID Rule is mainly used to create priorities for certain callers, but only for certain queues. For example, a caller might be assigned normal priority in the Customer Service queue, but a higher priority in the Sales queue.

4.3.2.1. Incoming Call DNIS

The DNIS the call came into. This DNIS must first be defined in *Incoming Calls DNISs*.

4.3.2.2. CLID

Caller Identification of the call

4.3.2.3. Queue

The queue this rule routes calls to.

4.3.2.4. Priority

The priority the call receives. The priority range is from 1 to 9 (where 1 is the highest and 9 is the lowest).

4.3.3. Route by CLID Rules

Go to *Queues & Rules, Routing Rules, Route by CLID Rules*

A Route by CLID Rule is a routing rule based on a specific CLID. Only incoming calls from the defined CLID (i.e., one specific caller) are routed according to this rule, regardless of the DNIS.

Use the Route by CLID Rules to assign certain callers to certain agents, or to assign certain priorities to callers in the general queue.

4.3.3.1. CLID

Caller Identification of the call

4.3.3.2. Queue

The queue this rule routes calls to.

4.3.3.3. Priority

The priority the call receives. The priority range is from 1 to 9 (where 1 is the highest and 9 is the lowest).

4.3.4. Route by DNIS Rules

Go to *Queues & Rules, Routing Rules, Route by DNIS Rules*

A Route by DNIS Rule is a routing rule based on a specific DNIS. Only calls incoming to this specific DNIS are routed according to this rule, regardless of the CLID.

Use the Route by DNIS rules to create different queues and agent groups to handle calls to different numbers, without the need for menus.

4.3.4.1. Incoming Call DNIS

The DNIS the call came into. This DNIS must first be defined in *Incoming Calls DNISs*.

4.3.4.2. Queue

The queue this rule routes calls to

4.3.4.3. Priority

The priority the call receives. The priority range is from 1 to 9 (where 1 is the highest and 9 is the lowest).

4.4. Queue Overflow Rules

Go to *Queues & Rules, Queue Overflow Rules*.

Optimus supports the overflowing of waiting calls from one queue to the other. There are three types of overflow rules:

- **Number of Waiting Calls:** For example, if there are already 10 calls waiting in the queue (and the call to be overflowed is to be the 11th) you can overflow the next call to a different queue.
- **Waiting Time:** For example, if a call is waiting for 30 seconds in the queue you can overflow this call to a different queue. This rule will overflow the call regardless of its position in the queue.
- **No Logged-in Agents in the Queue:** A possible situation is when all agents supposed to be handling a specific view have logged out of Optimus (or are on break). In this event, this overflow rule determines to which queue the call will overflow. If no such rule is defined for a queue, the call is overflowed to the default queue.

A call that was overflowed to a queue will be presented in that queue as an *inflowed* call, thus distinguishing it from regular *offered* calls (that arrived at that queue as a result of a routing rule).

4.4.1. Overflow from Queue

The queue the call overflows from.

4.4.2. Destination

The queue the call overflows to.

4.4.3. Overflow Reason

Optimus supports three types of overflow rules:

- Number of Waiting Calls – The number of calls waiting in the queue *before* the call to be overflowed.
- Waiting Time – The exact period of time, in seconds, that the call is waiting for so far, regardless of the call's position in the queue.
- No Logged-in Agents in the Queue – If for some reason there are no logged-in agents that are assigned to handle that queue.

4.4.4. Parameter

The parameter depends on the overflow reason:

- If the overflow reason is Number of waiting Calls then the Parameter is how many calls can wait in the queue before the next call overflows.
- If the overflow reason is Waiting Time then the Parameter is how many seconds a call can wait in the queue before it overflows.
- If the overflow reason is No Logged-in Agents in the Queue the Parameter is not relevant and is set to zero.

4.4.5. Overflow with Priority

The priority the call receives. A call's priority can be changed when it overflows. It can be increased or decreased according to business rules. The priority range is from 1 to 9 (where 1 is the highest and 9 is the lowest).

4.5. Database Connections

Go to *Queues & Rules, Database Connections*

Database connections are defined in order to provide integration between Optimus and external databases. This sort of integration is most useful when defining routing rules (see below) that depend on information not available to Optimus, but which resides in external databases such as the customers' CRM.

Database connections are configured using Microsoft's ODBC standard, and defining appropriate SQL queries. To define the SQL query click the SQL icon.

4.5.1. ODBC Connection String

The connection string to the database as defined in the MS-Windows ODBC settings. Contents of this field are displayed as asterisks since they contain user and password information.

4.5.2. Description

This is the description for this specific database connection and query. It is recommended to enter a plain-language description

4.5.3. Routing Information Request

It is possible to execute two general types of queries with the database: A Stored Procedure or a simple SQL Query. In each case, the SQL code for the information request should be provided by the entity responsible for the external database and entered in these fields, respectively.

4.5.4. Call Parameters

Mostly, the query results depend on the call's information. For example, Optimus requests the CRM database to assign priority to the call according to the call's CLID. This priority can be the result of the calling customer's status as a VIP customer.

5. Real Time

Real time displays provide actual, current information regarding the state of agents, queues, calls and the entire call center.

Optimus enables efficient call center management using these real time displays and helps supervisors to evaluate the minute-to-minute activities in the call center. In a small call center, a single agent on break might constitute even 20% of the call center's work force, a significant part.

Real time displays can be used either as part of the Optimus management GUI in the supervisor or manager's PC. Some of the Optimus real time displays are designed to be shown on larger screen such as wall-mounted plasma and LCD displays.

Real time information displayed can be either immediate – such as the amount of calls waiting in the queue *right now*, or accumulated for a certain period of time. The first type of information is called *state information*. Accumulated information will be accumulated for the period of time specified in the real time section of the configuration menu.

Real Time displays are refreshed in set intervals, specified in the real time section of the configuration menu.

5.1. Agents

Go to *Real Time, Agents*

The agent is the main resource of the call center. As such, efficient and appropriate management of agent activities is crucial to the smooth functioning of the call center. Use the agent real time displays to monitor the individual agent activities and apply call center current needs and status to agent decisions.

5.1.1. Current Agent State

- Parameters: Agent Group. Choose to either display a specific Agent Group or Groups, or all agents. Select several groups by using the mouse and the CTRL key.
- Displayed Fields:
 - Agent Name
 - Extension – The extension where the agent is currently logged in.
 - Agent Status – The following statuses are possible for an Optimus agent:

<u>Status</u>	<u>Explanation</u>
Ready Waiting	Agent is available to accept calls and is waiting for another call
On Call	Agent is currently engaged in a phone call
Not Ready	Agent is not ready (on break or other activity). Optimus will not route calls to the agent, but the time is still counted as logged in time. This status is usually accompanied by a <i>break type</i>
System Not Ready	The agent was on Ready Waiting status and Optimus routed a call to him. For no reason, the agent failed to accept the call. Once the elapsed time frame for this event expired (defined in the PBX, see LGN PBX Configuration Guide) the call will be returned to the queue and designated as a <i>returning call</i> . Optimus will change the agent's status to System Not Ready to notify the supervisor of the agent's

	behavior.
Logged Out	Agent is not logged into Optimus
Wrap Up Time	Agent has just finished a phone call and is on the pre-defined wrap up time period
Supervisor Logged Out	The agent has been logged out of Optimus by the supervisor, using the Agent Control Screen
Supervisor Ready Waiting	Agent is available to accept calls and is waiting for another call. The agent has been set to this status by the supervisor using the Agent Control Screen
Supervisor Not Ready	Agent is not ready (on break or other activity). Optimus will not route calls to the agent, but the time is still counted as logged in time. The agent has been set to this status by the supervisor using the Agent Control Screen
Pending Logged In	The agent has logged into Optimus but the log-in process has not yet been completed by the Optimus server. Usually this status cannot last more than a few seconds.
Pending Ready Waiting	The agent has logged into Optimus and requested to be put on Ready status, but the log-in process has not yet been completed by the Optimus server. Usually this status cannot last more than a few seconds.
Pending Not Ready	The agent is currently on a call but would like to take a break as soon as the call ends. Optimus allows the agent to place himself in this status, and so will not route any more calls to the agent once the call has ended.
Pending Logged Out	The agent is currently on a call but would like to log out of Optimus as soon as the call ends. Optimus allows the agent to place himself in this status, and so will not route any more calls to the agent and log him out once the call has ended.
Pending Supervisor	The agent is currently on a call but the supervisor has

Logged Out	logged him out of Optimus. Optimus allows the supervisor to place the agent in this status, and so will not route any more calls to the agent and log him out once the call has ended.
Pending Supervisor Not Ready	The agent is currently on a call but the supervisor has set his status to Not Ready. Optimus allows the supervisor to place the agent in this status, and so will not route any more calls to the agent once the call has ended.
Pending Remove	The agent is currently on call, but using the system GUI the extension or workstation where the agent is logged in has been removed from Optimus. Once the call ends, Optimus will disregard this workstation.

- Time – The period of the time the agent has been in the status displayed. Every time the agent's status changes, the time counter resets.

5.1.2. Agent State – Overhead Snapshot

The Agent Overhead Snapshot display enables the call center management to "build" a physical display of the call center, according to the way the agents are seated. Choose the agent's name from the pull-down list and observe each agent's state through the large icons.

5.1.3. Agent State – Overhead Snapshot by Extension

The Agent Overhead Snapshot display enables the call center management to "build" a physical display of the call center, according to the way the agents are seated. Choose the extension from the pull-down list and observe each agent's state through the large icons.

5.2. Queues

Go to *Real Time, Queues*

5.2.1. Queue Statistics

- **Parameters:** Queue. Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
- **Displayed Fields:**

<u>Field Headline</u>	<u>Field Type</u>	<u>Field Information</u>
Queue		
Max Wait Time	Accumulated	The maximal time a waiting call has waited in the queue before being answered.
AVG Wait Time	Accumulated	The average waiting time for calls in the queue.
Waiting Calls	State	The number of calls currently waiting in the queue.
Offered Calls	Accumulated	The number of calls offered to the queue, i.e. the calls that were routed to the queue as a result of a routing rule. Please note that calls that were overflowed into this queue are not counted in this field. (see <i>inflowed calls</i>)
Answered Calls	Accumulated	The number of calls answered in the queue
Inflowed Calls	Accumulated	The number of calls that were overflowed to the queue, for all overflow reasons.
Abandoned Calls	Accumulated	The number of calls that were abandoned by the caller while waiting in the queue.
Overflowed Calls	Accumulated	The number of calls that were overflowed to other queues according to overflow rules, for all overflow reasons.
Transferred to Default	Accumulated	The number of calls that were automatically transferred by Optimus to the systems' default queue. Please note that calls transferred to the default queue are not a usual event and might point to a problem: a

		queue unattended by agents, a wrongly set routing rule, or other problems, and this information should be checked.
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5.3. Devices

Go to *Real Time, Devices*

5.3.1. Optimus Main Devices

Displays all the Optimus Main Devices, the extensions used by Optimus to hold calls

Displayed Fields:

- Description: The OMD's description.
- Extension TN
- Extension Number
- Status - The following statuses are possible for an Optimus device:

<u>Status</u>	<u>Explanation</u>
IDLE	The device is idle and not handling any calls at the moment
ON_CALL	The device is on call
NOT_ACTIVE	A TAPI error was received during the line initialization procedure with the PBX. Check the device definitions in the PBX. If the problem persists, contact support.
TAPI_ERROR	A TAPI error was received during work of the device. This can be the result of numerous events, including LAN problems or LGN TSP failure. If the problem persists, contact support.

5.3.2. Agent Workstations

Displays all the Agent Workstations defined in Optimus.

Displayed Fields:

- Description: The workstation's description.
- Extension TN
- Extension Number
- Computer Name
- Status - The following statuses are possible for an Optimus workstation:

<u>Status</u>	<u>Explanation</u>
IDLE	The workstation is idle and not handling any calls at the moment
ON_CALL	The workstation is on call
NOT_ACTIVE	A TAPI error was received during the line initialization procedure with the PBX. Check the device definitions in the PBX. If the problem persists, contact support.
TAPI_ERROR	A TAPI error was received during work of the device. This can be the result of numerous events, including LAN problems or LGN TSP failure. If the problem persists, contact support.

5.4. Agent Control Screen

Go to *Real Time, Agent Control Screen*

The *Agent Control Screen* allows a supervisor or an manager to remotely perform the following actions on an agent:

- Login
- Logout
- Set an agent's state to Ready
- Set an agent's state to Not Ready
- Reset an agent's state to Ready Idle


Use the agent control screen to control agents that are not at their seat or in a situation when you wish to override the agent's status choice.

This feature is most useful in the PC-free mode, where agents do not use personal computers and thus the supervisor is responsible for login/logout actions.

6. Reports

Historical and statistical reports are the main tool used by the call center manager to analyze the call center activity. Optimus provides several aspects of reports, enabling the manager to analyze agent activities, queue call allocation, and the call center's general performance.

All Optimus reports are displayed via the web browser, thus enabling the manager to view the

reports everywhere. With a single click of a mouse on  icon, reports are displayed using MS-EXCEL.

6.1. Agents

Go to *Reports, Agents*

6.1.1. Agent Performance

- Parameters:
 - From / To Date
 - From / To Hour
 - Agents - Choose to either display a specific agent or agents, or all agents. Select several agents by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Agent Name	
Logged In Time	The accumulated amount of time the agent has been logged into Optimus.
Answered ACD Calls	The amount of calls answered by the agent that were assigned to the agent by Optimus, via routing rules and queue management.

Answered Non-ACD Calls	The amount of calls answered by the agent that were not assigned to the agent by Optimus, but dialed directly into the agent's extension.
Answered Calls Talk Time	The accumulated amount of time the agent has spent on phone calls, of both the ACD and Non-ACD types.
Percentage (%)	The percentage of time spent on phone calls out of the time logged into Optimus
Dialed Calls	The amount of dialed calls by the agent
Dialed Calls Talk Time	The accumulated amount of time the agent has spent on phone calls that they initiated (Dialed Calls)
Not Ready Time	The accumulated amount of time the agent has spent on "Not Ready" status, from various reasons
Percentage (%)	The percentage of time spent on "Not Ready" status out of the time logged into Optimus

6.1.2. Dialed Calls

The report displays all dialed calls by an agent.

- Parameters:
 - From / To Date
 - From / To Hour
 - Agents - Choose to either display a specific agent or agents, or all agents. Select several agents by using the mouse and the CTRL key.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Date	The exact timestamp when the call was initiated
Agent	The agent that dialed the call
Dialed Number	The number that was dialed
Call Duration	The length of the call

6.1.3. Internal Dialed Calls

The report displays internal dialed calls by an agent, i.e. calls that were dialed to other extensions in the PBX.

- Parameters:
 - From / To Date
 - From / To Hour
 - Agents - Choose to either display a specific agent or agents, or all agents. Select several agents by using the mouse and the CTRL key.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Date	The exact timestamp when the call was initiated
Agent	The agent that dialed the call
Dialed Number	The number that was dialed
Call Duration	The length of the call

6.1.4. External Dialed Calls

The report displays external dialed calls by an agent, i.e. calls that were dialed to numbers outside the company and PBX.

- Parameters:
 - From / To Date
 - From / To Hour
 - Agents - Choose to either display a specific agent or agents, or all agents. Select several agents by using the mouse and the CTRL key.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Date	The exact timestamp when the call was initiated
Agent	The agent that dialed the call
Dialed Number	The number that was dialed
Call Duration	The length of the call

6.1.5. Agent State

- Parameters:
 - From / To Date
 - From / To Hour
 - Agents - Choose to either display a specific agent or agents, or all agents. Select several agents by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Agent Name	
Logged In Time	The accumulated amount of time the agent has been logged into Optimus.
Time in status "Ready"	The accumulated amount of time the agent has been in "Ready" status.
Time in status "Not Ready"	The accumulated amount of time the agent has been in "Not Ready" status.
Time in Break Types	The accumulated amount of time the agent has been in each of the break types defined in Optimus. For each break type a different column in the report will be automatically created.

6.2. Queues

Go to *Reports, Queues*

6.2.1. Queue Statistics - Summarized

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Queue	
Offered Calls	The amount of calls routed to this queue by Optimus, as a result of routing rules. Please note that this number does not include calls that were overflowed into this queue (see <i>inflowed calls</i>)
Inflowed Calls	The amount of calls routed to this queue by Optimus, as a result of overflow rules, for various reasons.
Answered Calls	The amount of calls that were answered by agents handling this queue.
Abandoned Calls	The amount of calls that were abandoned, i.e. hung up by the caller, while waiting in this queue.
Overflowed Calls	The amount of calls that were overflowed to other queues, for various reasons.

6.2.2. Queue Statistics - Detailed

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Queue	
Offered Calls	The amount of calls routed to this queue by Optimus, as a result of routing rules. Please note that this number does not include calls that were overflowed into this queue (see <i>inflowed calls</i>)
Inflowed Calls	The amount of calls routed to this queue by Optimus, as a result of overflow rules, for various reasons.
Answered Calls	The amount of calls that were answered by agents handling this queue.
Percentage (%)	The percentage of calls answered out of calls offered and inflowed.
Abandoned Calls	The amount of calls that were abandoned, i.e. hung up by the caller, while waiting in this queue.
Percentage (%)	The percentage of calls abandoned out of calls offered and inflowed.
Overflowed Calls (Queue Position)	The amount of calls that were overflowed to other queues because of the queue position rule.
Percentage (%)	The percentage of calls overflowed due to queue position rule out of calls offered and inflowed.
Overflowed Calls (Waiting Time)	The amount of calls that were overflowed to other queues because of the waiting time rule.
Percentage (%)	The percentage of calls overflowed due to waiting time rule out of calls offered and inflowed.
Overflowed Calls (No	The amount of calls that were overflowed to other queues because of

Agents in Queue)	the no agents in queue rule.
Percentage (%)	The percentage of calls overflowed due to no agents in queue rule out of calls offered and inflowed.

6.2.3. Abandoned Calls by Thresholds

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Queue	
0-20	The amount of calls abandoned while waiting in the queue, and the waiting time was between 0 and 20 seconds.
21-40	The amount of calls abandoned while waiting in the queue, and the waiting time was between 21 and 40 seconds.
41-60	The amount of calls abandoned while waiting in the queue, and the waiting time was between 41 and 60 seconds.
61-80	The amount of calls abandoned while waiting in the queue, and the waiting time was between 61 and 80 seconds.
81-100	The amount of calls abandoned while waiting in the queue, and the waiting time was between 81 and 100 seconds.
101-120	The amount of calls abandoned while waiting in the queue, and the waiting time was between 101 and 120 seconds.
121 and above	The amount of calls abandoned while waiting in the queue, and the waiting time was more than 121 seconds.

6.2.4. Abandoned Calls by Thresholds - Detailed

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Queue	
0-4	The amount of calls abandoned while waiting in the queue, and the waiting time was between 0 and 4 seconds.
5-8	The amount of calls abandoned while waiting in the queue, and the waiting time was between 5 and 8 seconds.
9-12	The amount of calls abandoned while waiting in the queue, and the waiting time was between 9 and 12 seconds.
13-16	The amount of calls abandoned while waiting in the queue, and the waiting time was between 13 and 16 seconds.
17-20	The amount of calls abandoned while waiting in the queue, and the waiting time was between 17 and 20 seconds.
21-30	The amount of calls abandoned while waiting in the queue, and the waiting time was between 21 and 30 seconds.
31-40	The amount of calls abandoned while waiting in the queue, and the waiting time was between 31 and 40 seconds.
41-50	The amount of calls abandoned while waiting in the queue, and the waiting time was between 41 and 50 seconds.
51-60	The amount of calls abandoned while waiting in the queue, and the waiting time was between 51 and 60 seconds.
61-80	The amount of calls abandoned while waiting in the queue, and the

	waiting time was between 61 and 80 seconds.
81-100	The amount of calls abandoned while waiting in the queue, and the waiting time was between 81 and 100 seconds.
101-120	The amount of calls abandoned while waiting in the queue, and the waiting time was between 101 and 120 seconds.
121-150	The amount of calls abandoned while waiting in the queue, and the waiting time was between 121 and 150 seconds.
151-180	The amount of calls abandoned while waiting in the queue, and the waiting time was between 151 and 180 seconds.
181-240	The amount of calls abandoned while waiting in the queue, and the waiting time was between 181 and 240 seconds.
241-300	The amount of calls abandoned while waiting in the queue, and the waiting time was between 241 and 300 seconds.
301 and above	The amount of calls abandoned while waiting in the queue, and the waiting time was more than 301 seconds.

6.2.5. Answered Calls by Thresholds

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Queue	
0-20	The amount of calls answered in the queue, and the waiting time was between 0 and 20 seconds.
21-40	The amount of calls answered in the queue, and the waiting time was

	between 21 and 40 seconds.
41-60	The amount of calls answered in the queue, and the waiting time was between 41 and 60 seconds.
61-80	The amount of calls answered in the queue, and the waiting time was between 61 and 80 seconds.
81-100	The amount of calls answered in the queue, and the waiting time was between 81 and 100 seconds.
101-120	The amount of calls answered in the queue, and the waiting time was between 101 and 120 seconds.
121 and above	The amount of calls answered in the queue, and the waiting time was more than 121 seconds.

6.2.6. Answered Calls by Thresholds - Detailed

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Queue	
0-4	The amount of calls answered in the queue, and the waiting time was between 0 and 4 seconds.
5-8	The amount of calls answered in the queue, and the waiting time was between 5 and 8 seconds.
9-12	The amount of calls answered in the queue, and the waiting time was between 9 and 12 seconds.
13-16	The amount of calls answered in the queue, and the waiting time was

	between 13 and 16 seconds.
17-20	The amount of calls answered in the queue, and the waiting time was between 17 and 20 seconds.
21-30	The amount of calls answered in the queue, and the waiting time was between 21 and 30 seconds.
31-40	The amount of calls answered in the queue, and the waiting time was between 31 and 40 seconds.
41-50	The amount of calls answered in the queue, and the waiting time was between 41 and 50 seconds.
51-60	The amount of calls answered in the queue, and the waiting time was between 51 and 60 seconds.
61-80	The amount of calls answered in the queue, and the waiting time was between 61 and 80 seconds.
81-100	The amount of calls answered in the queue, and the waiting time was between 81 and 100 seconds.
101-120	The amount of calls answered in the queue, and the waiting time was between 101 and 120 seconds.
121-150	The amount of calls answered in the queue, and the waiting time was between 121 and 150 seconds.
151-180	The amount of calls answered in the queue, and the waiting time was between 151 and 180 seconds.
181-240	The amount of calls answered in the queue, and the waiting time was between 181 and 240 seconds.
241-300	The amount of calls answered in the queue, and the waiting time was between 241 and 300 seconds.
301 and above	The amount of calls answered in the queue, and the waiting time was more than 301 seconds.

6.2.7. Queues TSF

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
 - Report Type – By choosing different time intervals in the report type parameter, it is possible to compare the agent's performance over similar periods of time.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Queue	
Offered Calls	The amount of calls routed to this queue by Optimus, as a result of routing rules. Please note that this number does not include calls that were overflowed into this queue (see <i>inflowed calls</i>)
Inflowed Calls	The amount of calls routed to this queue by Optimus, as a result of overflow rules, for various reasons.
Answered Calls in less than 30 seconds	The amount of calls that were answered by agents handling this queue, after a waiting time of less than 30 seconds.
Answered Calls in more than 30 seconds	The amount of calls that were answered by agents handling this queue, after a waiting time of more than 30 seconds.
TSF – Telephone Service Factor	<p>The amount of calls answered in less than the preset service factor.</p> <p>The exact formula is (for a specific queue): (Answered in less than 30 seconds / (offered + inflowed – Abandoned in less than 30 seconds)) * 100</p> <p>For a total Call Center TSF the same formula applies without the <i>inflowed calls</i> parameter.</p>

6.2.8. Answered Calls

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Date	The exact date and time of the call.
DNIS	The DNIS the call came into the call center through.
Queue	The queue the call was answered from.
Agent	The name of the agent answering the call.
CLID	Caller ID of this call. (a blank value means an unidentified call)
Call Duration	The length of the call.

6.2.9. Abandoned Calls

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Date	The exact date and time of the call.
DNIS	The DNIS the call came into the call center through.
Queue	The queue the call was answered from.
CLID	Caller ID of this call. (a blank value means an unidentified call)

6.2.10. Overflowed Calls

- Parameters:
 - From / To Date
 - From / To Hour
 - Queues - Choose to either display a specific queue or queues, or all queues. Select several queues by using the mouse and the CTRL key.
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
From Queue	The queue the calls overflowed from .
Destination	The queue the calls overflowed to.
Overflow Reason	The reason the calls overflowed, according to overflow rules.
Overflowed Calls	The amount of overflowed calls.

6.3. Calls

Go to *Reports, Calls*

6.3.1. Incoming Calls

This report provides a complete list of all calls incoming into Optimus.

- Parameters:
 - From / To Date
 - From / To Hour
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Date	The exact date and time of the call.
DNIS	The DNIS the call came into the call center through.
CLID	Caller ID of this call. (a blank value means an unidentified call)

6.3.2. Calls Routed to Default Number

This report provides a complete list of all calls that Optimus routed to its default number. These calls generally indicate a problem that should be addressed, such as missing routing rules to cover all eventualities.

- Parameters:
 - From / To Date
 - From / To Hour
- Displayed Fields:

<u>Field Headline</u>	<u>Field Information</u>
Date	The exact date and time of the call.
DNIS	The DNIS the call came into the call center through.
CLID	Caller ID of this call. (a blank value means an unidentified call)

Appendix a

Aspire Advanced Software Solutions & Integration (2005)

OPTIMUS

LG-Nortel PBX Configuration Guide for Optimus

Revision 1.4

Scope

This guide provides instructions regarding the configuration of the LG-Nortel various PBXs to work with Optimus Call Center. The guide refers to the following models:

- LDK100 / ipLDK100
- LDK300 / ipLDK300
- iPECS

Please note that Optimus works closely with the LGN PBXs, and failure to follow any of the following steps might cause Optimus not to perform properly.

This guide refers to Optimus version 0.20 and no other prior or later versions. For other versions please refer to the correct System Manual.

Clarification: All male-oriented references in this document are intended for both male and female readers and users.

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LDK100 Configuration

System Configuration

1. Set the IP address to an address of the same class as the IP address of the Optimus server (PGM108/2).
2. Set the *Transfer Recall time* to a reasonable value (PGM180/7 = 10). It determines the number of seconds that the call is waiting for the agent to answer before returning to the Optimus. Recommended value is between 10 to 20 seconds.
3. Set the *System Hold Recall Time* to 280 seconds (PGM180/6 = 280).
4. Set the *Exclusive Hold Recall Time* to 280 seconds (PGM180/4 = 280).
5. Set the *I Hold Recall Time* to 280 seconds (PGM180/5 = 280).
6. Set DID Convert Type to 2 (PGM143/4 = 2).
7. Disable Internal Paging and External Paging (PGM111/8 = Off).
8. Set a *Night Service* (Optional). For an Optimus backup, program all external lines (PRI) on *Night Mode* ringing directly at the agents' extensions.
9. Enable the CLI on all the lines (PGM143/1).

Optimus Main Device Configuration

1. At least one LKD/LDP terminal (Optimus Main Device) with 30 buttons per every PRI.
2. Each terminal should be programmed with all *Loop Buttons*.
3. Set the *Auto Hold* feature to *On* (PGM112/2 = On)
4. Set the *DID Wait* to *on* in all the LKD/LDP terminals (PGM114/17 = on).
5. Set the *Preset CFW Timer* to 12 seconds (PGM181/12 = 12)
6. Set the *Call FWD Preset* to an extension or a group (used as an Optimus backup when Optimus is down) (PGM121).

Agent's Extensions Configuration

1. Disable the *DND* feature in all the Agent's Extensions (PGM111/3 = Off)
2. Disable internal voice mails in all the Agent's Extensions.
3. Set the *DID Wait* to *on* in all the Agent's Extensions (PGM114/17 = On)

LDK300 Configuration

System Configuration

1. Set the IP address to an address of the same class as the IP address of the Optimus server (PGM108/2).
2. Set the *Transfer Recall time* to a reasonable value (PGM180/7 = 10). It determines the number of seconds that the call is waiting for the agent to answer before returning to the Optimus. Recommended value is between 10 to 20 seconds.
3. Set the *System Hold Recall Time* to 280 seconds (PGM180/6 = 280).
4. Set the *Exclusive Hold Recall Time* to 280 seconds (PGM180/4 = 280).
5. Set the *I Hold Recall Time* to 280 seconds (PGM180/5 = 280).
6. Set DID Convert Type to 2 (PGM143/4 = 2).
7. Disable Internal Paging and External Paging (PGM111/8 = Off).
8. Set a *Night Service* (Optional). For an Optimus backup, program all external lines (PRI) on *Night Mode* ringing directly at the agents' extensions.
9. Enable the CLI on all the lines (PGM143/1).

Optimus Main Device Configuration

1. At least one LKD/LDP terminal (Optimus Main Device) with 30 buttons per every PRI.
2. Each terminal should be programmed with all *Loop Buttons*.
3. Set the *Auto Hold* feature to *On* (PGM112/2 = On)
4. Set the *DID Wait* to *on* in all the LKD/LDP terminals (PGM114/17 = on).
5. Set the *Preset CFW Timer* to 12 seconds (PGM181/12 = 12)
6. Set the *Call FWD Preset* to an extension or a group (used as an Optimus backup when Optimus is down) (PGM121).

Agent's Extensions Configuration

1. Disable the *DND* feature in all the Agent's Extensions (PGM111/3 = Off)
2. Disable internal voice mails in all the Agent's Extensions.
3. Set the *DID Wait* to *on* in all the Agent's Extensions (PGM114/17 = on).

iPECS Configuration

System Configuration

1. Set the IP address to an address of the same class as the IP address of the Optimus server (PGM108/2).
2. Set the *Transfer Recall time* to a reasonable value (PGM180/7 = 10). It determines the number of seconds that the call is waiting for the agent to answer before returning to the Optimus. Recommended value is between 10 to 20 seconds.
3. Set the *System Hold Recall Time* to 580 seconds (PGM180/6 = 580).
4. Set the *Exclusive Hold Recall Time* to 580 seconds (PGM180/4 = 580).
5. Set the *I Hold Recall Time* to 580 seconds (PGM180/5 = 580).
6. Set DID Convert Type to 2 (PGM143/4 = 2).
7. Disable Internal Paging and External Paging (PGM111/8 = Off).
8. Set a *Night Service* (Optional). For an Optimus backup, program all external lines (PRI) on *Night Mode* ringing directly at the agents' extensions.
9. Enable the CLI on all the lines (PGM143/1).

Optimus Main Device Configuration

1. At least one LKD/LDP terminal (Optimus Main Device) with 30 buttons per every PRI.
2. Each terminal should be programmed with all *Loop Buttons*.
3. Set the *Auto Hold* feature to *On* (PGM111~113/19 = On)
4. Set the *DID Wait* to *on* in all the LKD/LDP terminals (PGM111~113/43 = on).
5. Set the *Preset CFW Timer* to 12 seconds (PGM181/12 = 12)
6. Set the *Call FWD Preset* to an extension or a group (used as an Optimus backup when Optimus is down) (PGM121).

Agent's Extensions Configuration

1. Disable the *DND* feature in all the Agent's Extensions (PGM111~113/3 = Off)
2. Disable internal voice mails in all the Agent's Extensions.
3. Set the *DID Wait* to *on* in all the Agent's Extensions (PGM111~113/43 = on).

How to configure a Hot Desk Attribute (Dummy) (PGM250)

This section describes how to configure a Hot Desk Attribute (also known as Dummy station). A Hot Desk Attribute (HDA) can be used for receiving calls from a voice mail.

LDK 100 Configuration Details

1. PGM112 – Select station range.
2. PGM112/23 = On.
3. PGM250/1 = Select the amount of HDA.
4. Copy from PGM250/2 the extension/port range.
5. PGM227 – enter the access code (password) for each extension according to the port number.

LDK 300 Configuration Details

1. PGM112 – Select station range.
2. PGM112/23 = On.
3. PGM250/1 = Select the amount of HDA.
4. Copy from PGM250/2 the extension/port range.
5. PGM227 – enter the access code (password) for each extension according to the port number.

iPECS Configuration Details

1. PGM111~113 – Select station range.
2. PGM111~113/30 = On.
3. PGM250/1 = Select the amount of HDA.
4. Copy from PGM250/2 the extension/port range.
5. PGM227 – enter the access code (password) for each extension according to the port number.

Using VMIB for Group/DNIS Announcement

This section describes how to configure the VMIB to play different announcement according to the DNIS or the group of the call.

1. Using the ATT record an announcement for each DNIS (using system prompt 001-070).
2. Program a Hot Desk Attribute PGM250 (section How to configure a Hot Desk Attribute).
3. Build a circular group (PGM190).
 - a. The member of the circular group is one of the HDA programmed in section 2 (PGM250/2).
4. Station Group Attribute Assign (PGM191):
 - a. Set VMIB Announce 1 Timer = 1.
 - b. Set VMIB Announce 1 Location = XX (XX = System Prompt configured in section 1).
 - c. Set Overflow Destination to Optimus Main Device.
 - d. Set Overflow Timer to the desired value (Recommended value is 2).
5. Flexible DID Table (PGM231):
 - a. Set the Day Destination to the HAD programmed in section 2 for the matching Index (where Index is the DNIS).

Appendix b

Aspire Advanced Solutions

OPTIMUS

QuickStart Guide

Revision 1.3

Scope

The purpose of this guide is to provide a quick reference for basic configuration for the Optimus Call Center system from Aspire. The guide includes nine basic yet imperative steps for basic system configuration.

Once all the steps are completed, users should have a basic, functional call center including one DNIS, one queue and one agent group. Also, following these steps should provide users with the basic knowledge for system configuration. A complete reference for all Optimus features is available in the Optimus System Manual.

This Optimus System Manual refers to Optimus version 0.20 and no other prior or later versions. For other versions please refer to the correct System Manual.

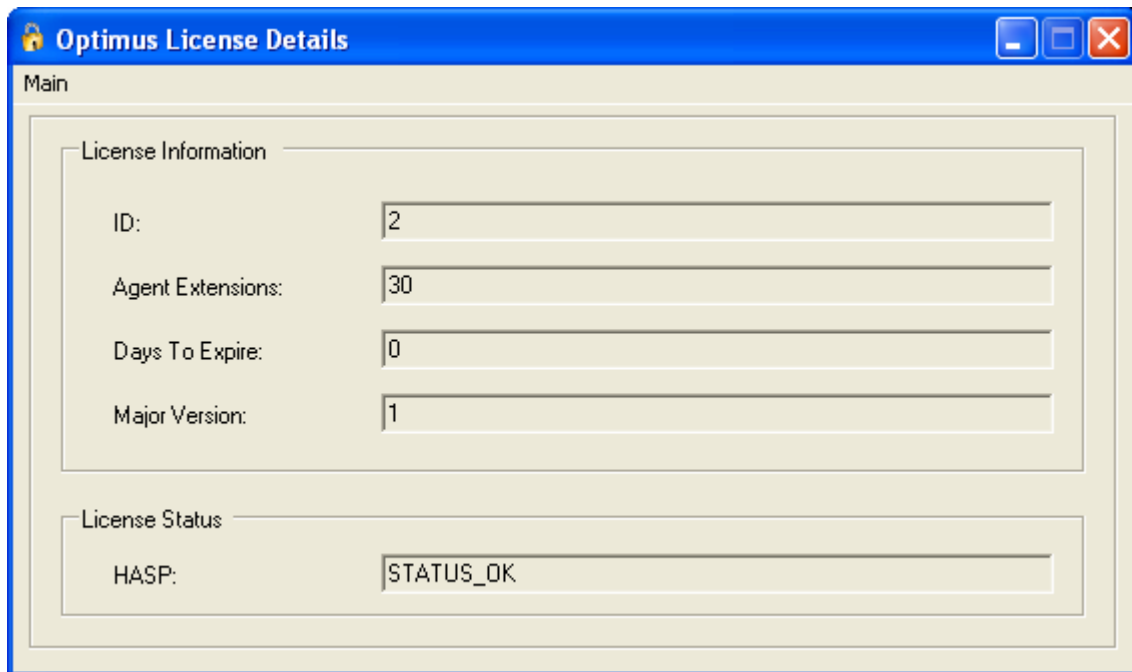
Clarification: All male-oriented references in this document are intended for both male and female readers and users.

Step 1 – Optimus Activation

Once installation is complete, you can activate Optimus using a dongle or an activation code provided by your local dealer.

Dongle Activation Method

1. When using a Dongle activation method, simply plug the dongle to a USB Host Controller. Open the Optimus License Details application (Start /Programs /Aspire-as /Optimus /Optimus License Details) and check that the license information is correct.



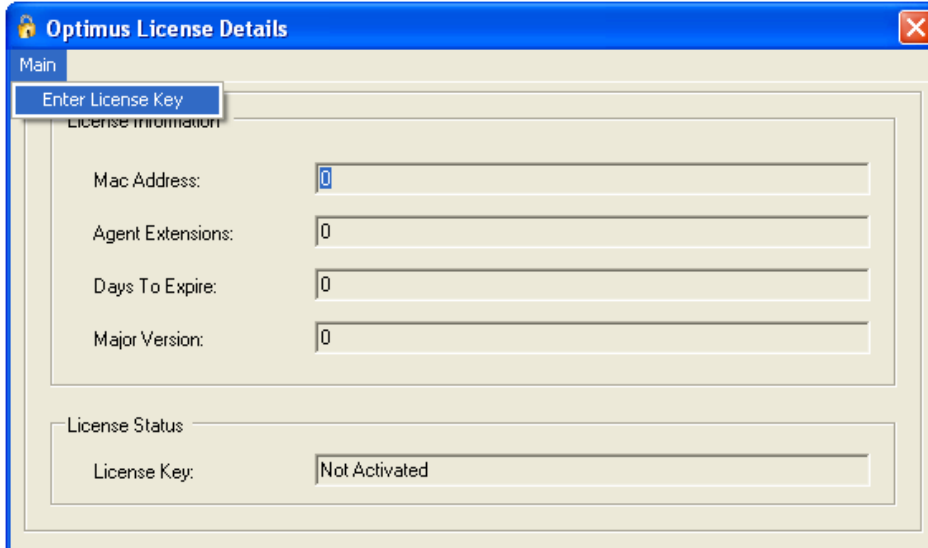
License Information	
ID:	2
Agent Extensions:	30
Days To Expire:	0
Major Version:	1

License Status	
HASP:	STATUS_OK

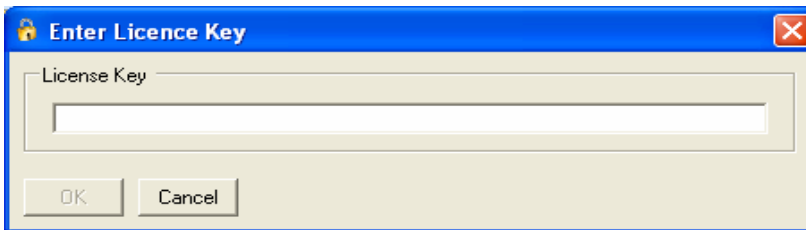
In this scenario, skip to "Optimus Maintenance", Page 6.

Activation Code (based on MAC Address) Activation Method

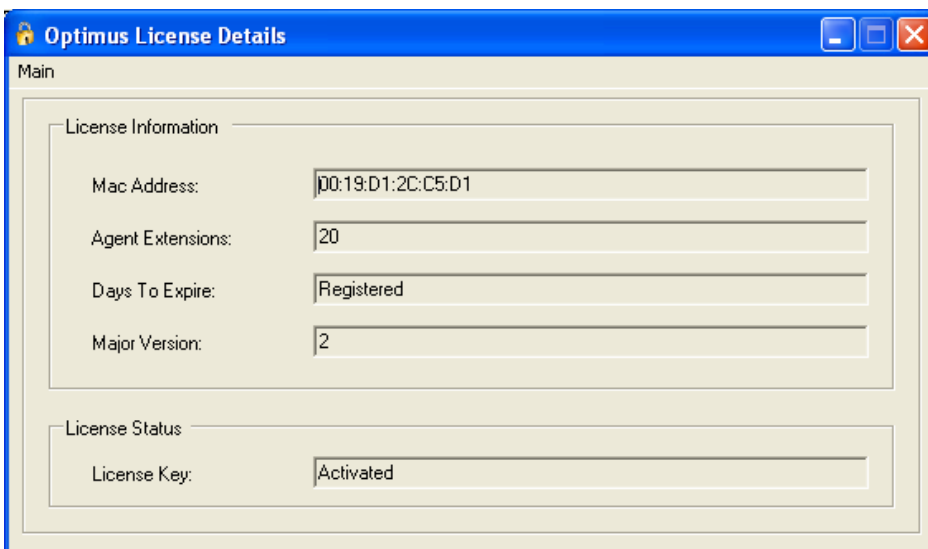
1. When using an activation code, open the Optimus License Details application (Start /Programs /Aspire-as /Optimus /Optimus License Details). From the *Main* menu, choose *Enter License Key*.



2. In the *Enter License Key* screen enter the activation code and press the *Ok* button.

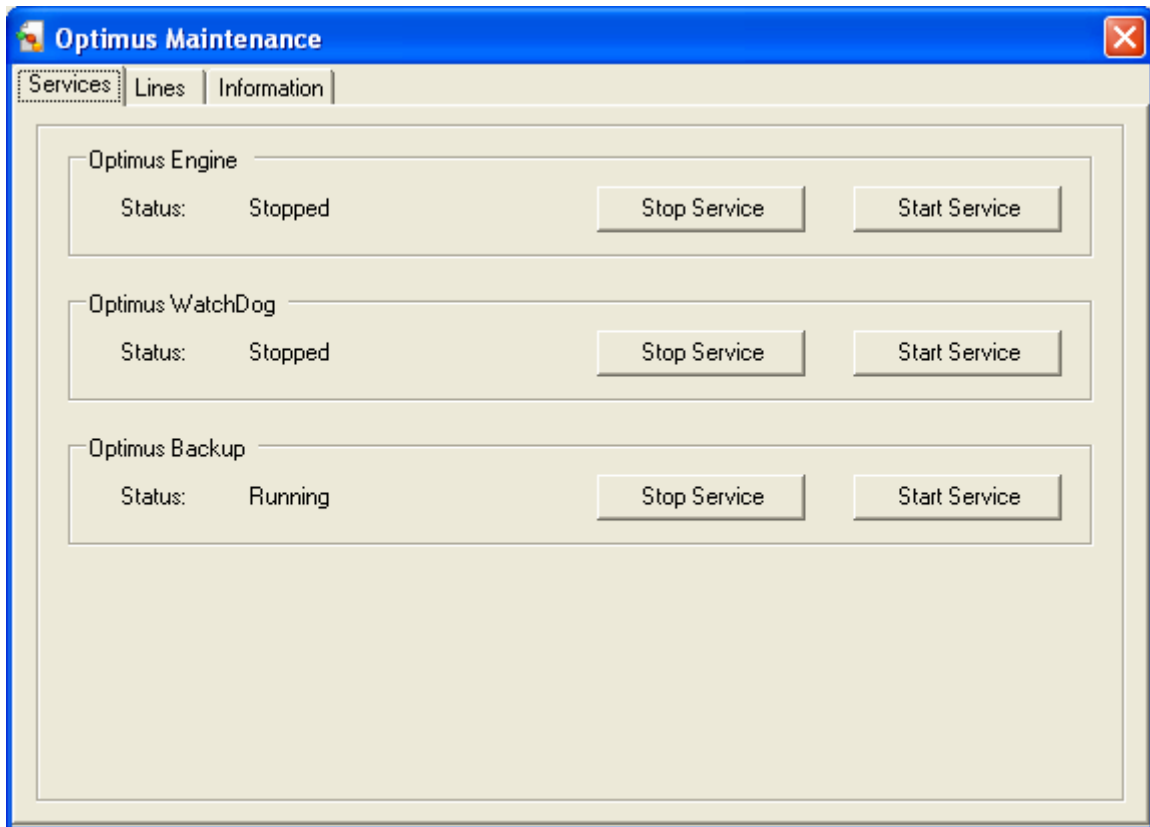


3. Check that the license information is correct.



Optimus Maintenance

When Optimus is activated, start Optimus service (or restart it if it was already started) from the Optimus Maintenance application (Start /Programs /Aspire-as /Optimus /Optimus Maintenance).



Starting Optimus service

Configuring Optimus

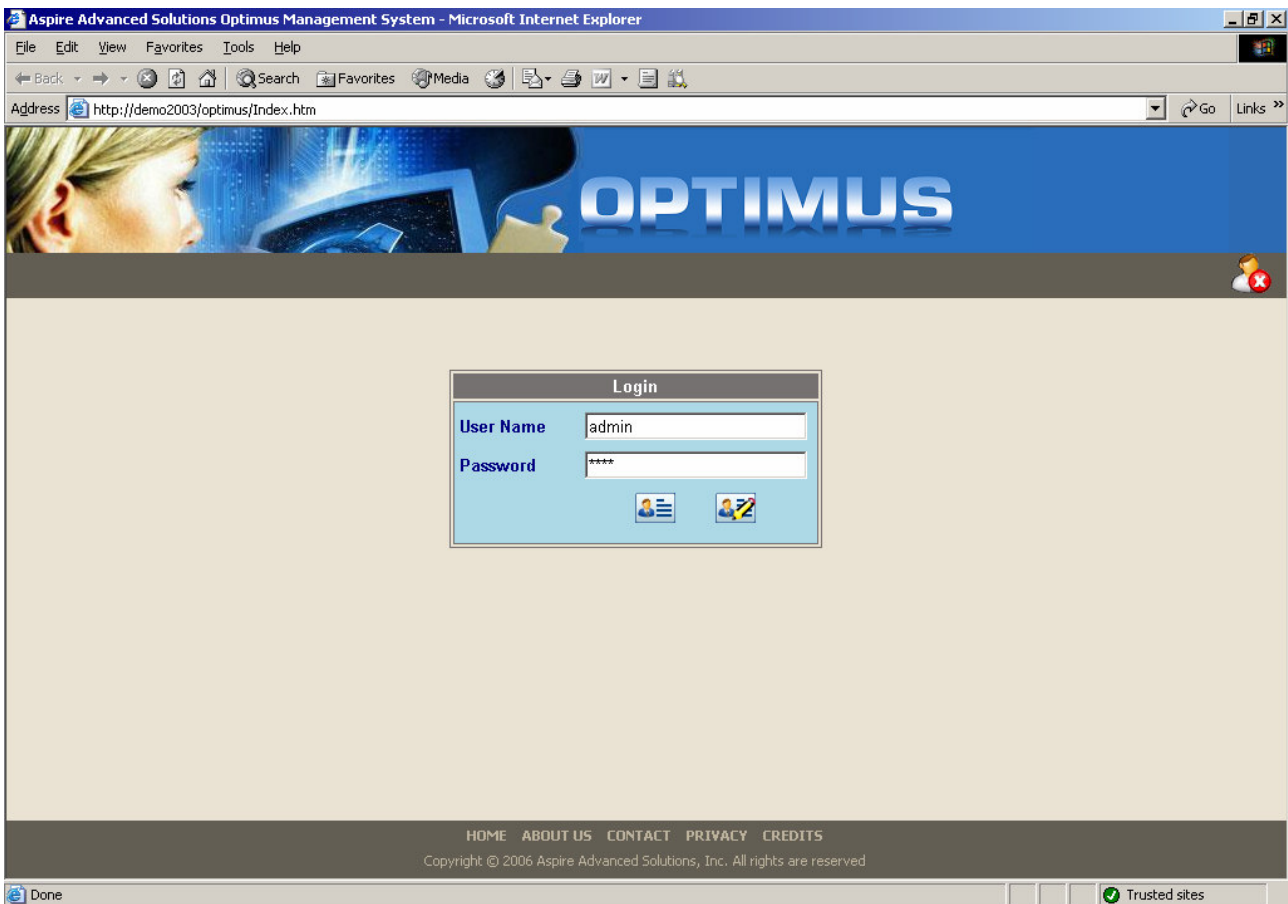
The following steps are done in the Optimus Management System which is accessible via Microsoft Internet Explorer from any computer connected to the Optimus server.

Open Microsoft Internet Explorer and type the following URL in the address bar:

[http://\[OPTIMUS_SERVER_MACHINE_NAME\]/Optimus/index.htm](http://[OPTIMUS_SERVER_MACHINE_NAME]/Optimus/index.htm)

where [OPTIMUS_SERVER_MACHINE_NAME] is the machine name or IP address where the Optimus is installed.

In the login screen the username is *admin* and the password is *1234*. This is the default user installed with the Optimus – Do not Change it.



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Step 2 – Main System Default Number

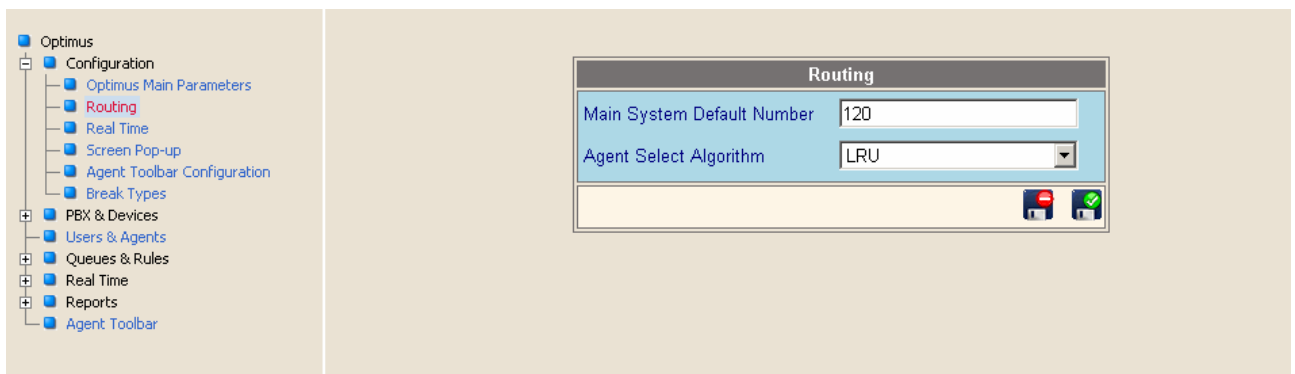
The Main System Default Number is where calls will be routed in several cases:

- No agents are logged into the system
- Faulty routing rules cause infinite loops
- Other cases where the system does not have information as to where the call should be routed.

Aspire recommends setting this number to the extension number of the Call Center's shift manager – who would be able to understand why the call was routed to them and act accordingly to remedy the situation. It is highly recommended that this extension is not used as an agent's extension.

To set the default transfer number, go to *Configuration/ Routing* and set the *Main System Default Number*.

Click on the *Save* icon when finished.



Step 2

Step 3 – Optimus Main Devices

Optimus relies on a single smart PBX station (per PRI connection) to handle waiting calls.

To add new device, go to *PBX & Devices/ Optimus Main Devices*.

The fields are:

Extension TN

Choose an extension from the available list (DKT Station).

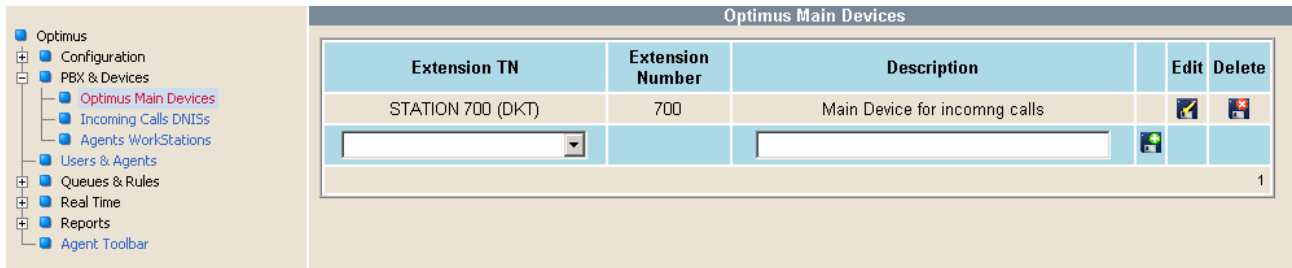
Extension Number

Type the extension number - this is the station's DNIS (Dialed Number Identification Service).

Description

Type a free text which describes the extension.

Click on the *Save* icon when finished.



Step 3

Step 4 – Incoming Calls DNISs

Optimus supports an unlimited number of incoming numbers from which calls can be handled (DNIS).

One station can receive calls from several DNISs. Suppose you have 2 DNISs: the first is XXXX101 and the second is XXXX102. Inside the PBX you can configure a station to receive both DNISs calls. Therefore you should add both 101 and 102 as a DNIS.

These numbers (101 & 102) allows you later to set a different Optimus queue for each DNIS.

You can configure incoming calls to 101 to go to Queue Sales and 102 to go to Queue Support.

To add an Incoming Calls DNIS, go to *PBX & Devices/ Incoming Calls DNISs*.

The fields are:

Dialed Number

Type the extension number - this is the DNIS (Dialed Number Identification Service) received for this extension

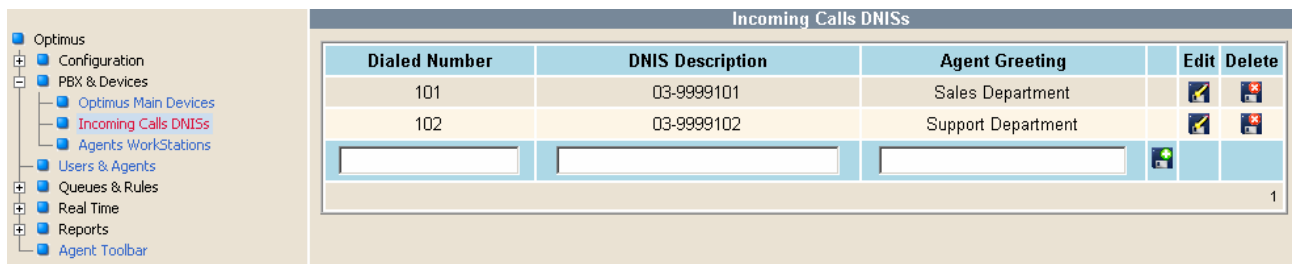
DNIS Description

Type a free text which describes the extension.

Agent Greeting

Type a free text which will be displayed in the pop up screen.

Click on the *Save* icon when finished.



Dialed Number	DNIS Description	Agent Greeting	Edit	Delete
101	03-9999101	Sales Department		
102	03-9999102	Support Department		
<input type="text"/>	<input type="text"/>	<input type="text"/>		

Step 4

Step 5 – Agent Workstations

An extension is a combination of a phone set and a computer where an agent can log in to Optimus and receive ACD calls. Optimus supports agent roaming to all extensions connected to your LG PBX.

To add an extension, go to *PBX & Devices/ Agent WorkStations*.

The fields are:

Extension TN

Choose an extension from the available list.

Extension Number

Type the extension number - this is the station's DNIS (Dialed Number Identification Service).

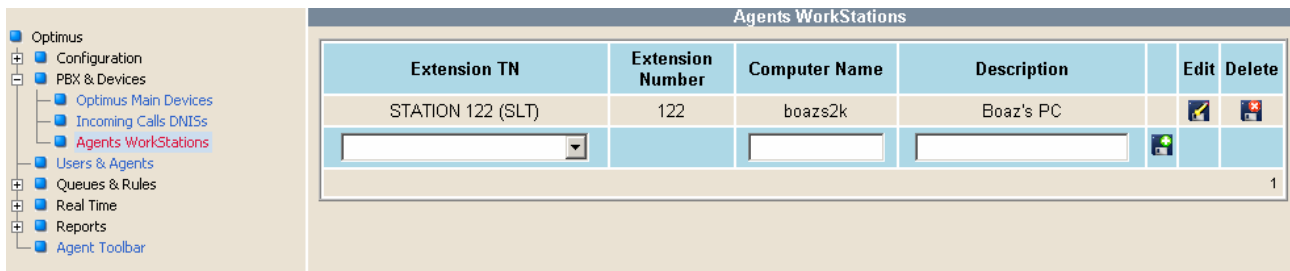
Computer Name





The host name (or IP address in case you use fixed addresses in your network) of the computer being used in this work station

Description

Type a free text which describes the work station.

Click on the *Save* icon when finished.



Extension TN	Extension Number	Computer Name	Description	Edit	Delete
STATION 122 (SLT)	122	boazs2k	Boaz's PC		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		

Step 5

Step 6 – Users & Agents

Optimus arrives with one pre-configured *Administrator* type user. In order for calls to be handled by agents, at least one user must be added of *Agent* type user.

To add a new user, go to *Users & Agents* and click the *Add* icon.

The fields are:

Username

A username is unique throughout the system and is up to 10 characters. Mandatory field.

Password

Up to 10 characters. Mandatory field.

User Type

Available user types are Administrator, Supervisor and Agent. Mandatory field.

Given Name

The first name of the user.

Surname

The surname of the user.

Comments

Free text to describe the user.

Click on the *Save* icon when finished.



Users & Agents	
Username	John
Password	****
Confirm Password	****
User Type	Agent
Given Name	John
Surname	doe
Comments	New Agent

Step 6

Step 7 – Queues

A queue is a logical object in the Optimus system where a call is while there is no available agent to answer it. For example: Sales queue or Help Desk queue.

To add a new queue, go to *Queues & Rules/ Queues* and click on the *Add* icon.

The fields are:

Queue Name

The name of the queue.

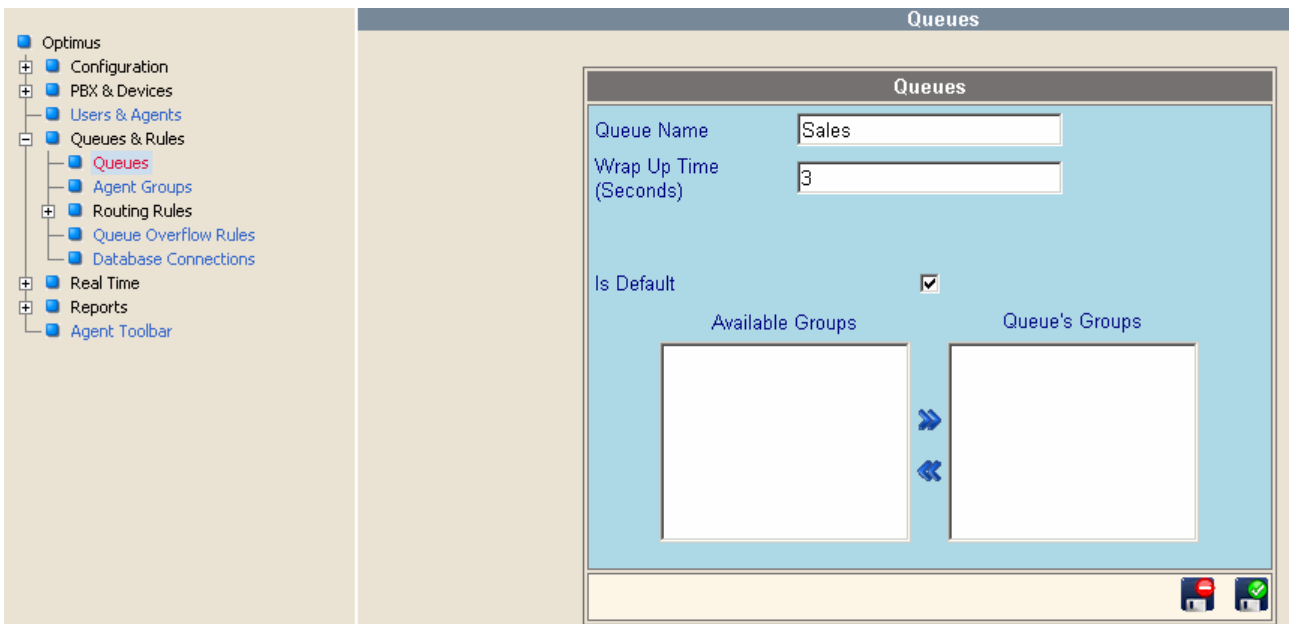
Wrap Up Time (Seconds)

When an agent finishes an ACD call, Wrap up Time is the number of seconds to wait before transferring another ACD call to this agent.

Is Default

If this queue is the default queue of the system or not (Check Box). By default, if only one queue is defined then it is the default queue.

Click on the *Save* icon when finished.



Step 7

Step 8 – Groups

A Group contains one or more queues. An agent is assigned to one or more groups, which means that he can answer a call which is waiting in any of the queues in the groups he is assigned to.

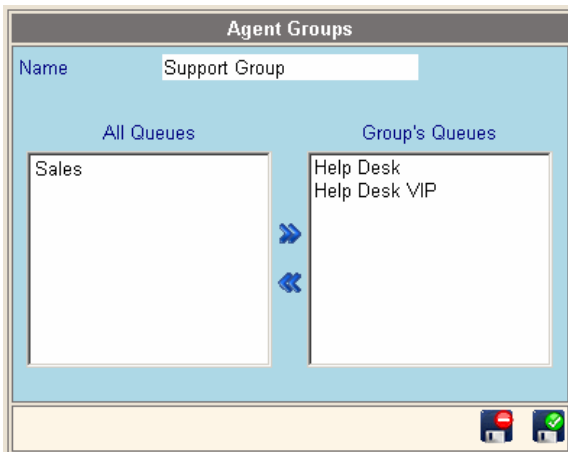
In this step do the following:

1. Add a group and Attribute the queue you added in step 7 to this group.
2. Go back to the main Group screen and click on the Users icon and Assign the users you created on step 6 to this group. Any user added to this group can answer calls routed to any of the queues assigned to this group.

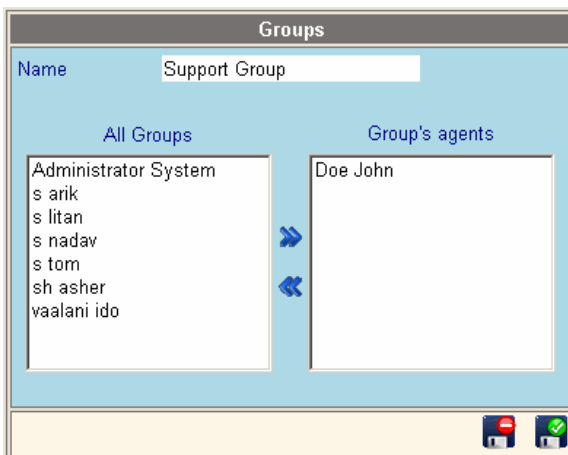
To add a new group, go to *Queues & Rules/ Agent Groups*, and click on the *Add* icon.

Group Name: The name of the group.

Click on the *Save* icon when finished.



Step 8.1



Step 8.2

Step 9 – Routing Rules

A routing rule determines to which queue the call will be routed to. A routing rule can be based on one of the following combinations:

1. Customer's Database rules
2. DNIS & CLID
3. CLID
4. DNIS

In this step we will configure a routing rule based on a DNIS.

To add a new routing rule, go to *Queues & Rules/ Routing Rules/ Route by DNIS Rules*.

The fields are:

Incoming Call DNIS

The DNIS of this rule. Select a DNIS configured in step 4.

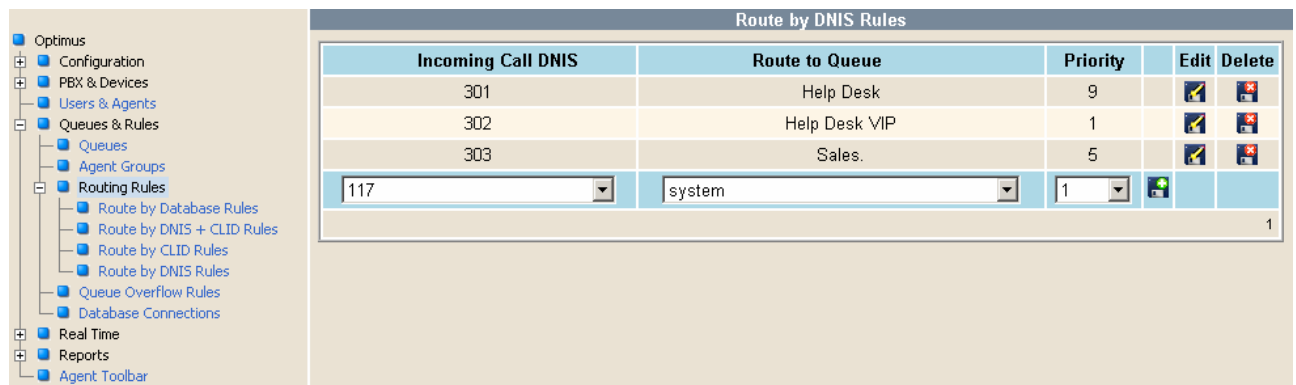
Route to Queue

The queue that a call to this DNIS will be routed to. Select a queue configured in step 7.

Route with Priority

The priority given to a call in this queue. The highest priority is 1.

Click on the *Save* icon when finished.



Incoming Call DNIS	Route to Queue	Priority	Edit	Delete
301	Help Desk	9		
302	Help Desk VIP	1		
303	Sales.	5		
117	system	1		

Step 9

Summary

If you followed all the steps than Optimus is now ready to receive ACD calls and route it to agents.

Let's review all the steps:

1. Activate Optimus.
2. Define the default transfer number. It is used only on extreme situations.
3. Add an Optimus Main Device. This is the station that physically holds all the calls.
4. Add an Incoming Call DNIS (Dialed Number Identification Service).
5. Add Agents Workstations. Workstation is a combination of a phone set and a computer where an agent can log in to Optimus and receive ACD calls.
6. Add a user of type Agent.
7. Add a queue to receive the incoming ACD calls.
8. Add a group and assign the queue to this group.
9. Add a routing rule to route a call to the DNIS added in step 4 to a queue added in step 7.

In order to complete the test, log in with the user added in step 6 in the extension added in step 5. Open the agent toolbar (go to *Agent, Toolbar*), click the *Login* button and then click the *Ready* button. Dial a call to the DNIS added in step 4 (an outside call, not a direct inside call). Optimus will then answer the call and place it on the queue added in step 7. Since the agent is on *Ready* status, Optimus will route the call to this agent. If you dial another call to this DNIS while the agent is still on the call, the new call will be placed on hold in the queue, waiting for the agent to finish his current call before transferring the new call to the agent.

Appendix c

Aspire Advanced Software Solutions & Integration (2005)

OPTIMUS

Installation Guide

Revision 1.2

Scope

This installation guide provides documentation for the system requirements and installation instructions for Optimus Call Center and LG-Nortel TSP.

This Optimus System Manual refers to Optimus version 0.20 and no other prior or later versions. For other versions please refer to the correct System Manual.

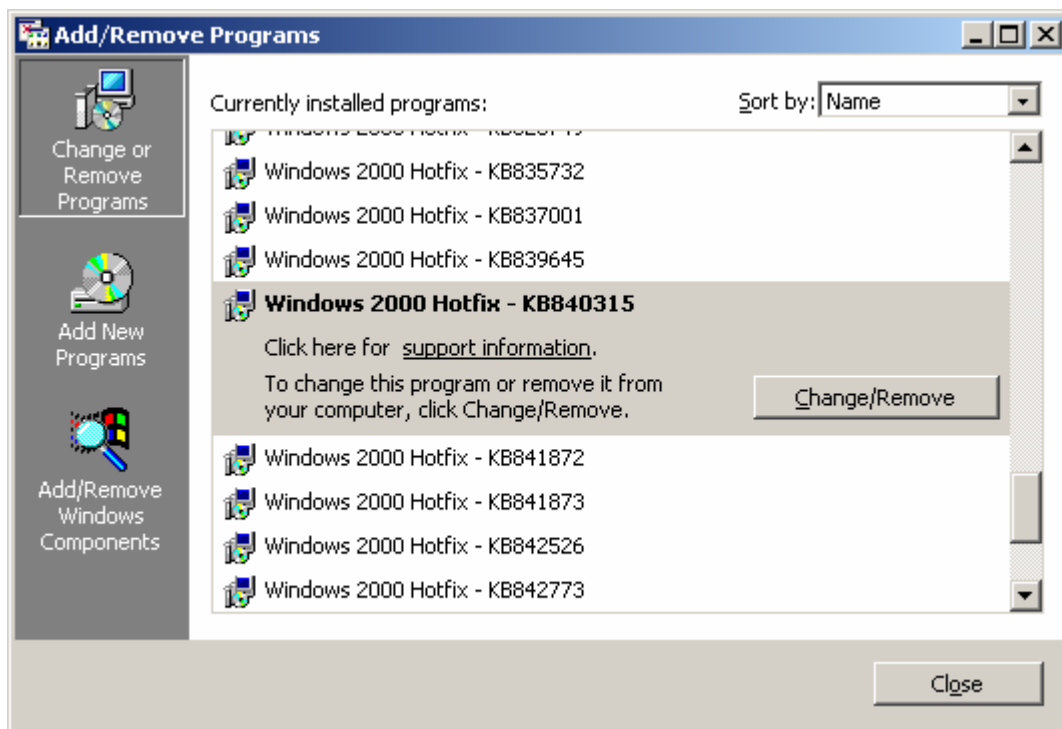
Clarification: All male-oriented references in this document are intended for both male and female readers and users.

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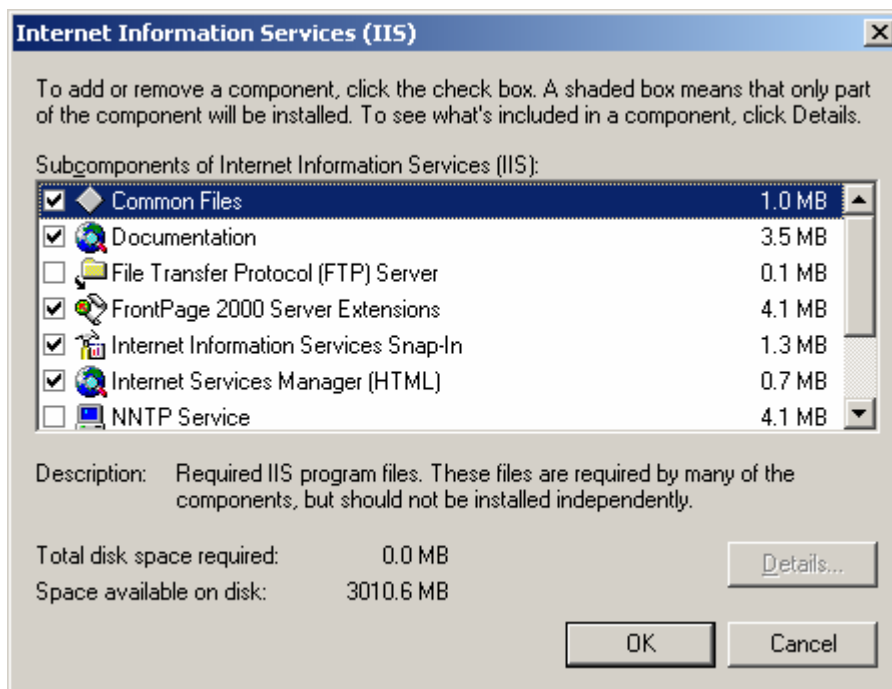
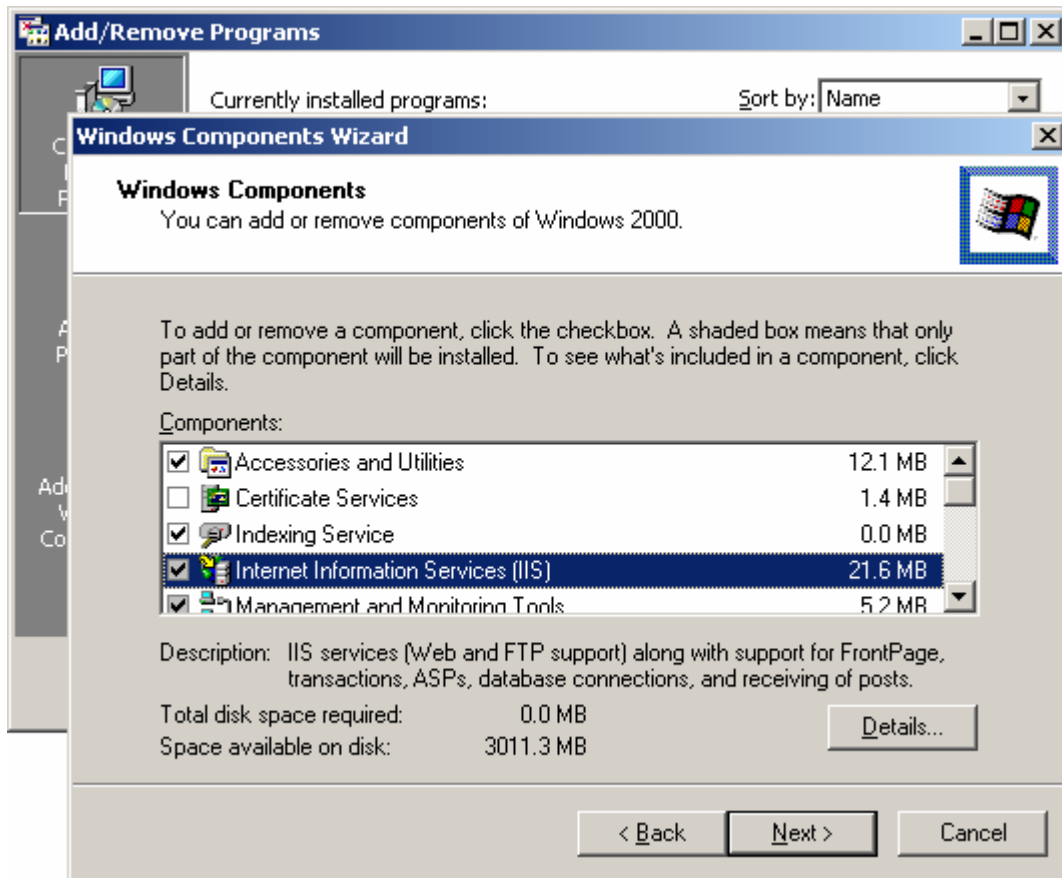
Software Prerequisites

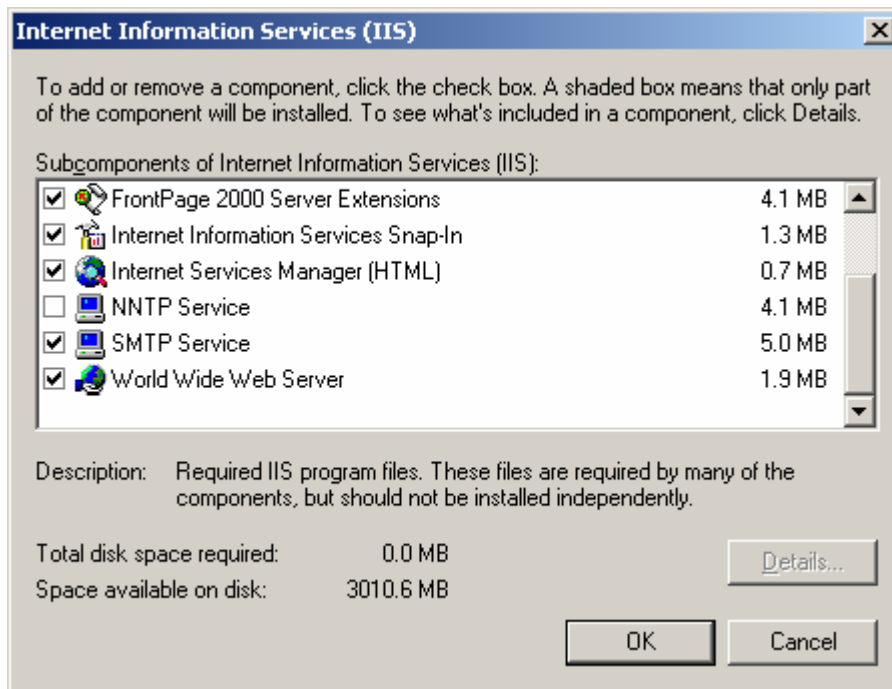
1. Microsoft Windows 2000 Server or Microsoft Windows 2003 Server.
2. IIS 6.0 and up.

Go to Start, Settings, Control Panel, Add/Remove Programs, Add/Remove Windows Components check that Internet Information Services (IIS) is checked in Windows 2000 Server, or Application Server in Windows 2003 Server.

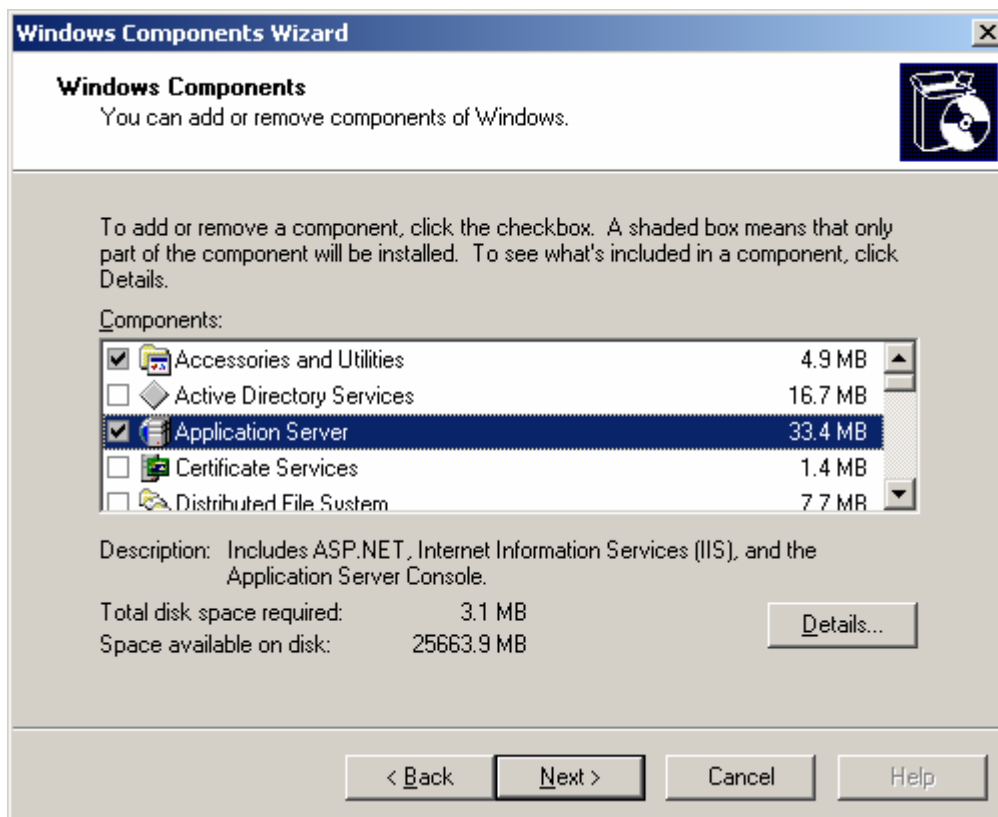


In Windows 2000 Server:

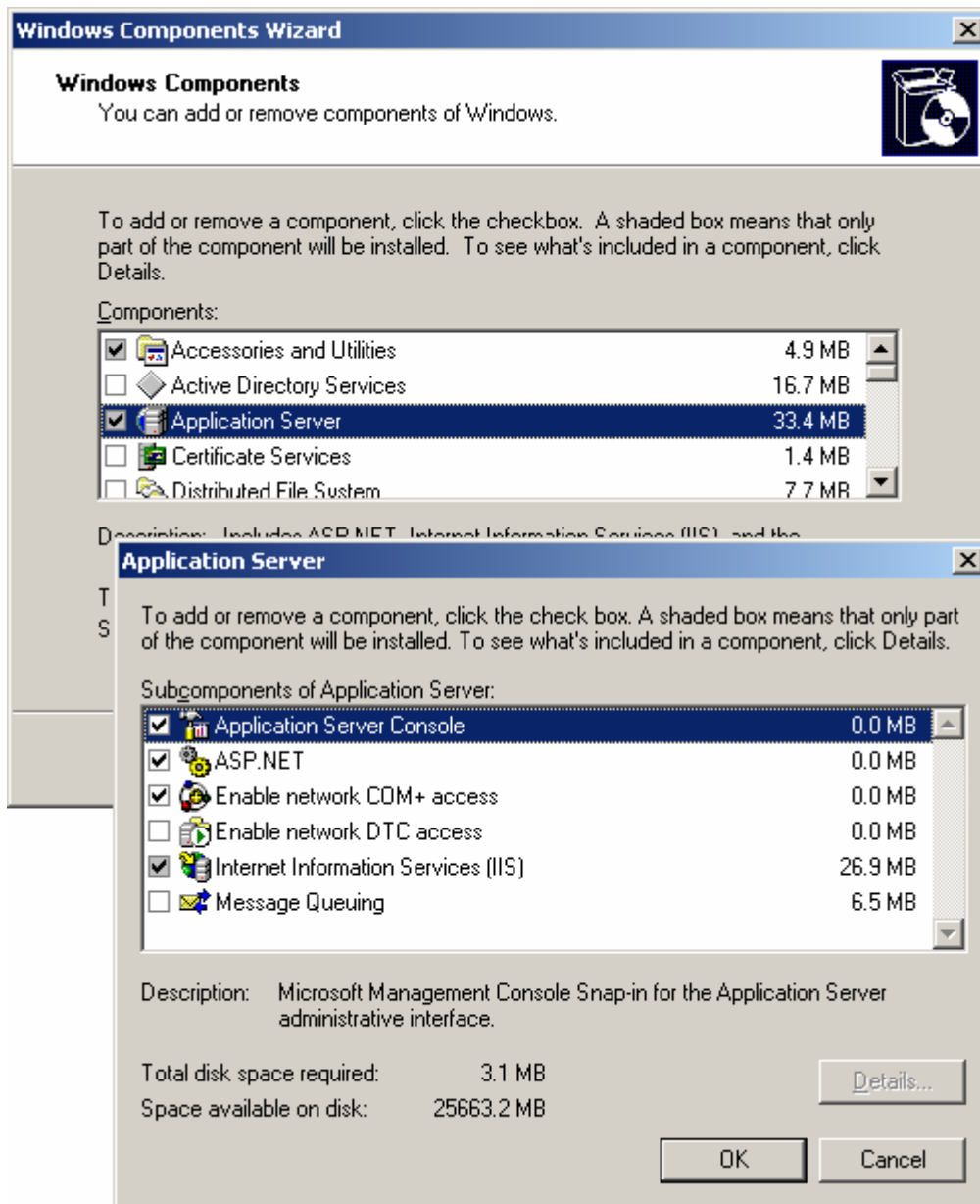




In Windows 2003 Server:



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3. Microsoft Internet Explorer 5.1 and up in all the client machines.

Optimus Installation

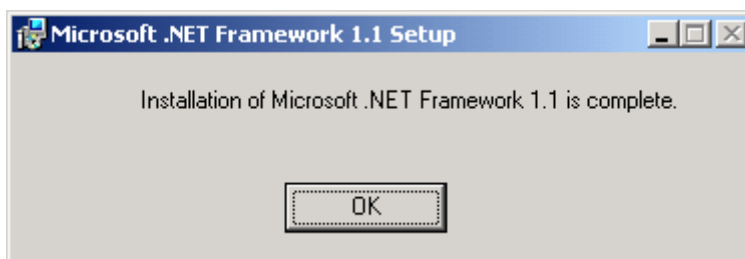
Before installing Optimus, please make sure you have a properly configured LG-Nortel PBX. For configuration instructions, please see the LDK configuration guide for Optimus.

Insert the Optimus CD into your CD / DVD drive. Installation should start up automatically. If the Autorun feature is disabled in your computer, please select the Setup.EXE file from the CD and double-click it.

The installation program will check for Microsoft .Net Framework 1.1 presence on your computer. If it is not installed, setup will install it automatically:



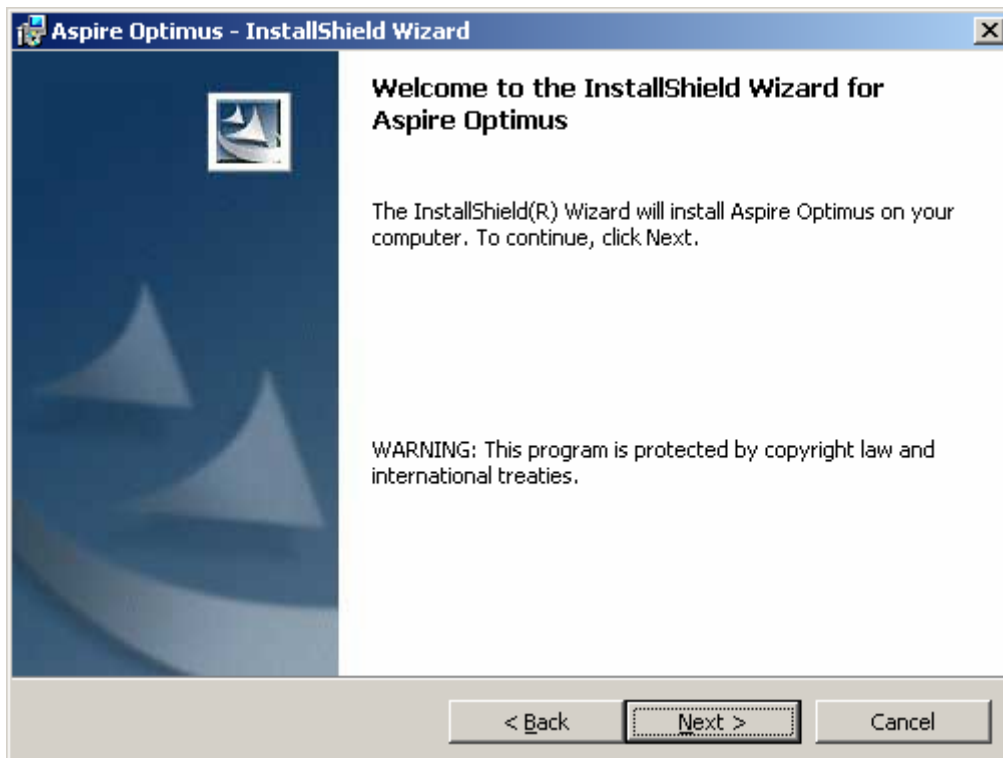
Select "Install"



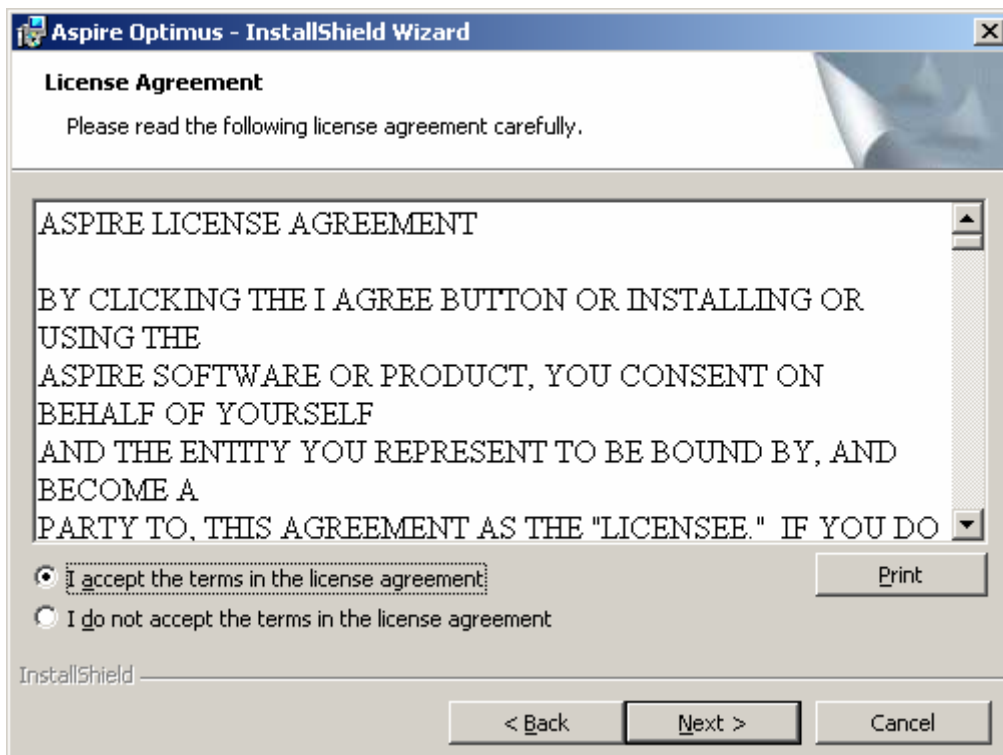
When .Net installation is complete select "OK".



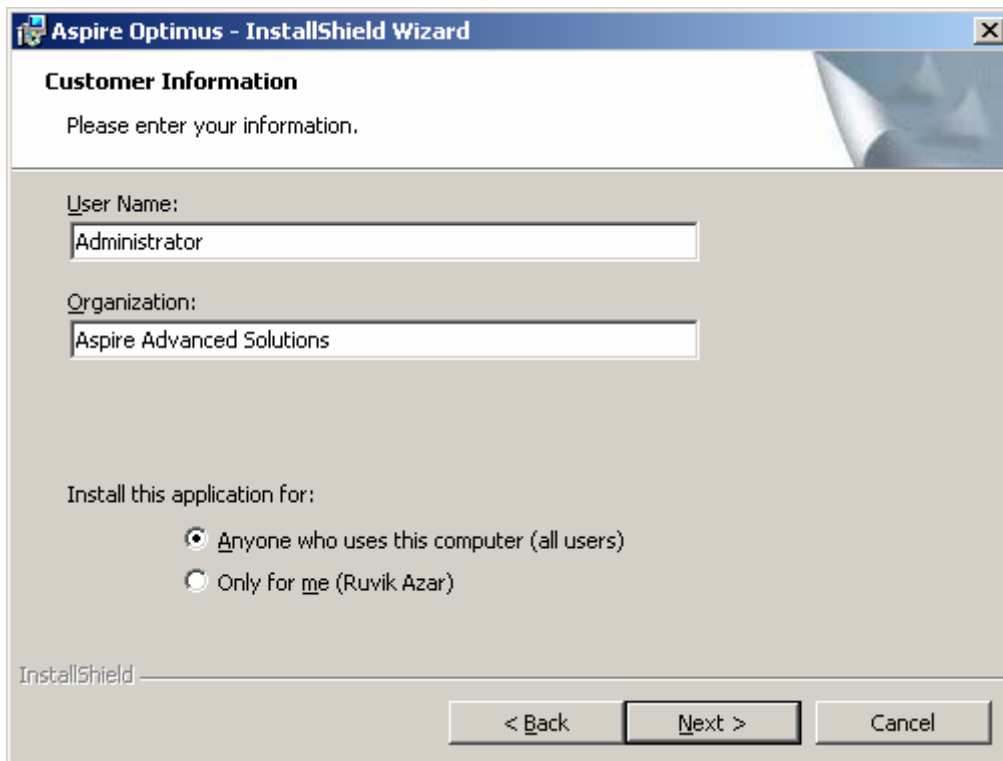
Select "Next".



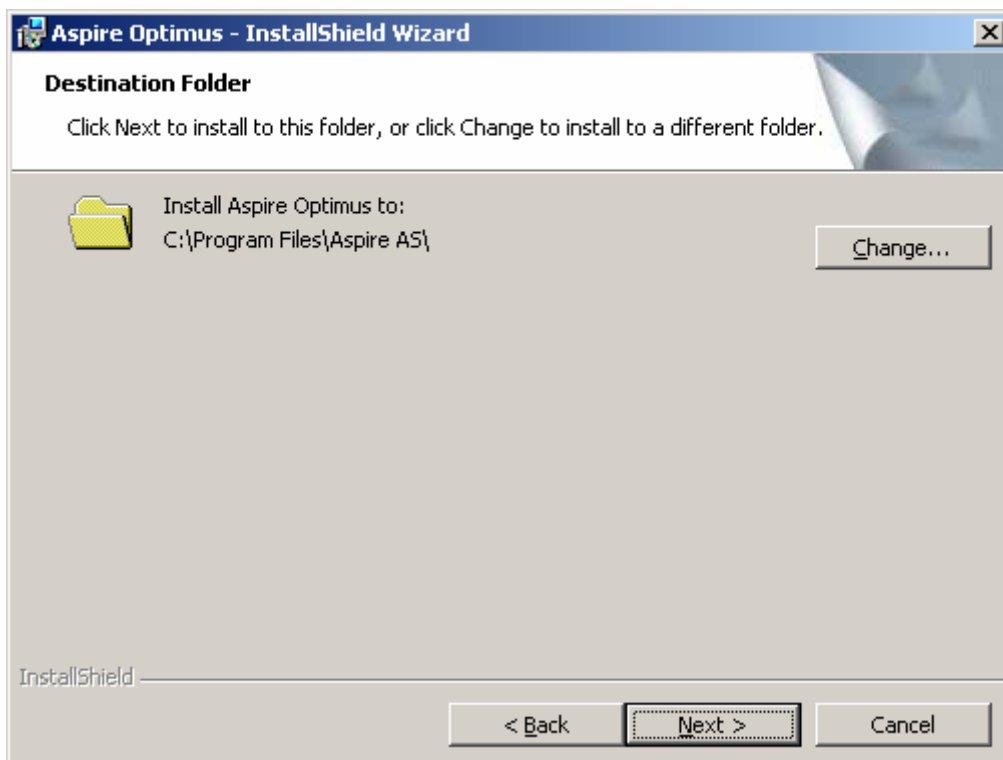
Select "Next".



Select "I accept..." and then select "Next".

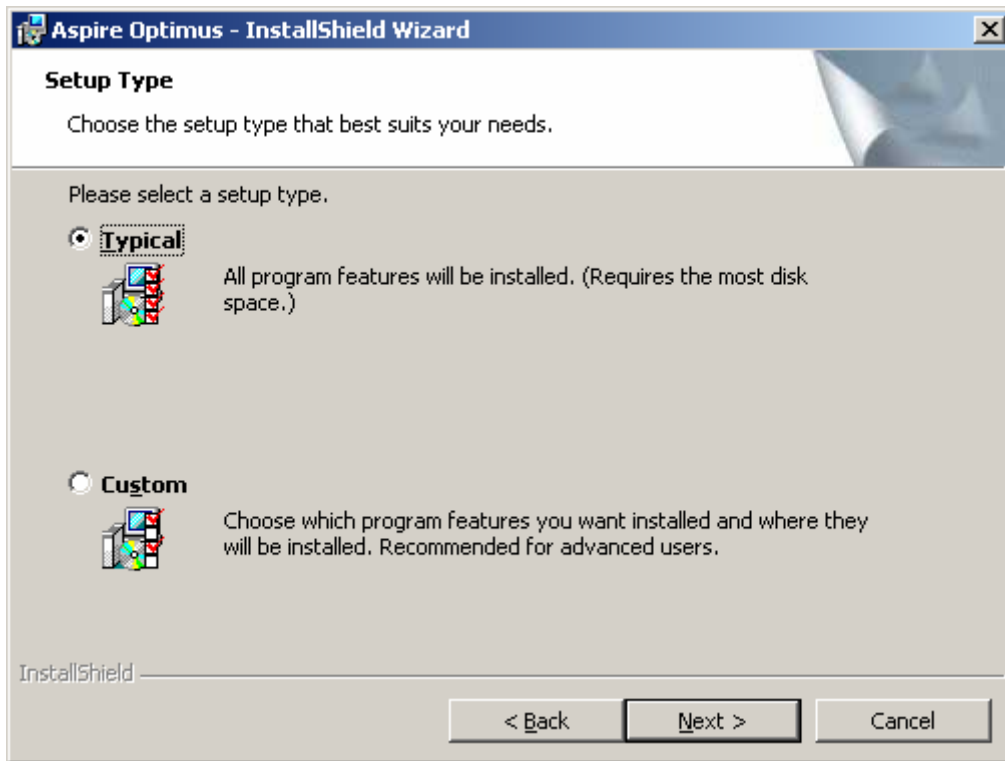


Make sure the application is installed for anyone who uses this computer (all users) and select "Next".

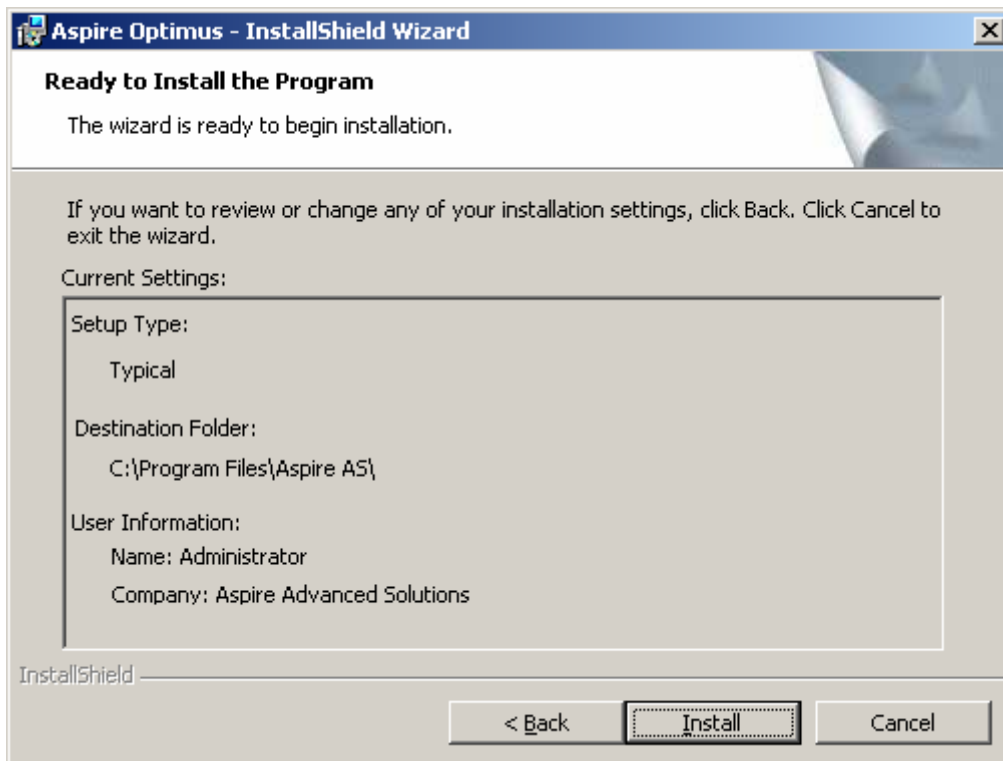


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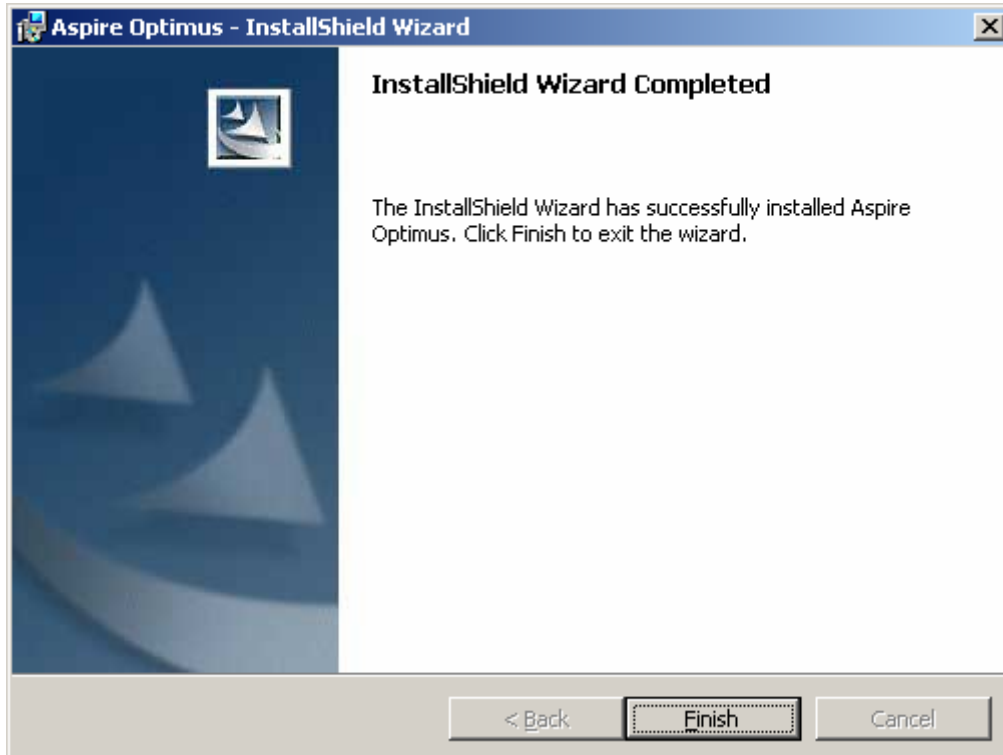
Select "Next".



Select a typical installation and then select "Next".



Select "Install".

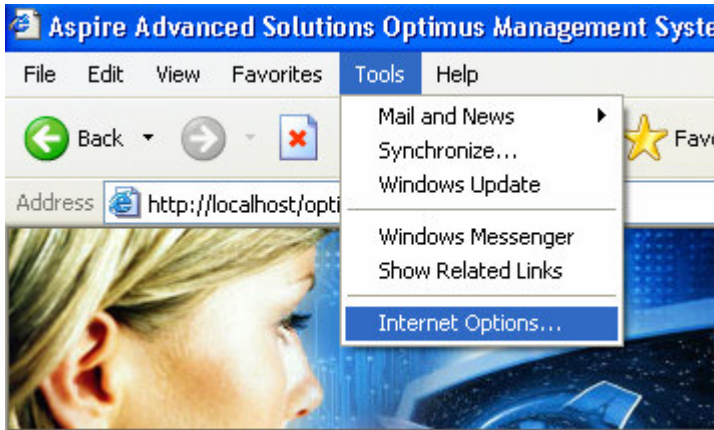


When installation is complete, select "Finish"

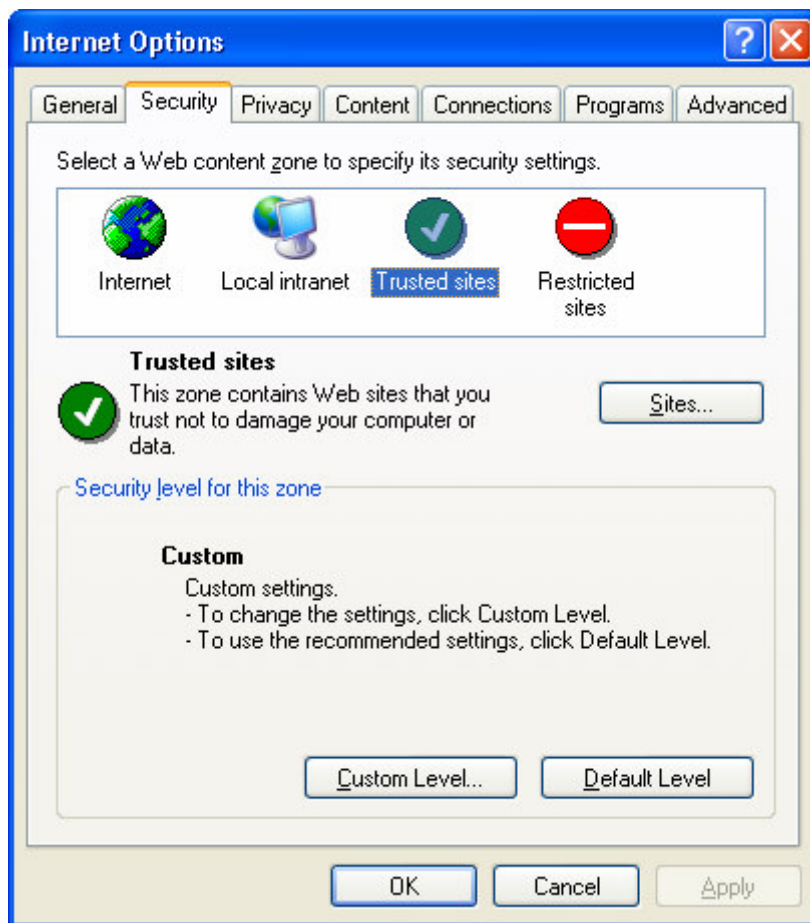
User browser configuration

The following configuration must be applied to all client PCs.

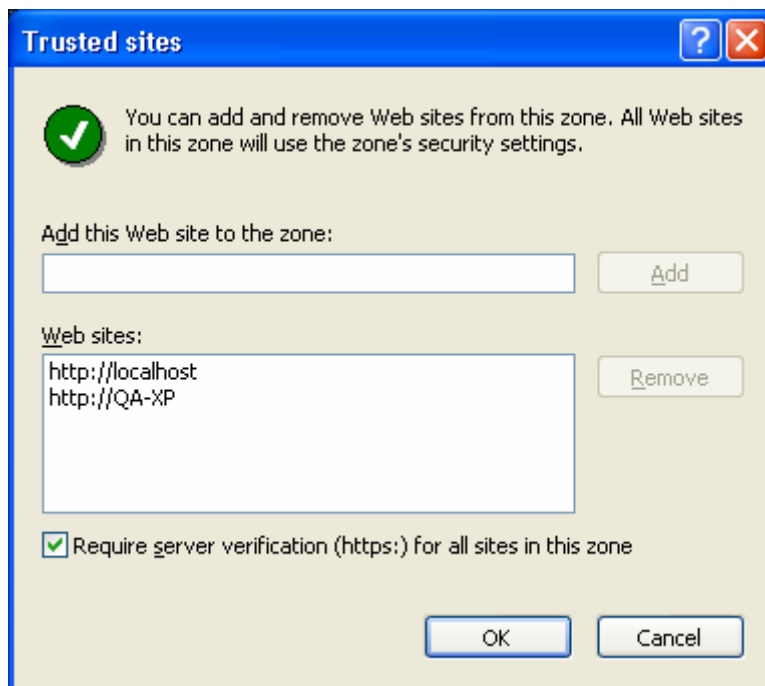
In Internet Explorer, open the Internet Options from the Tools menu.



Under the Security folder, select *Trusted Sites* and click the *Sites* button.

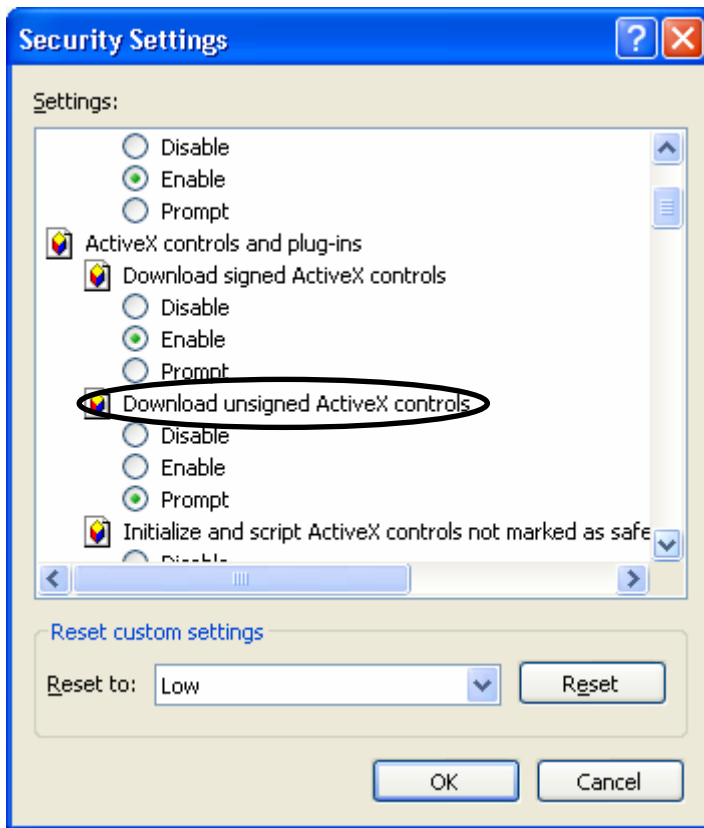


Add the computer name where the Optimus server has been installed, for example: <http://OptimusServer>, select Add and then OK.



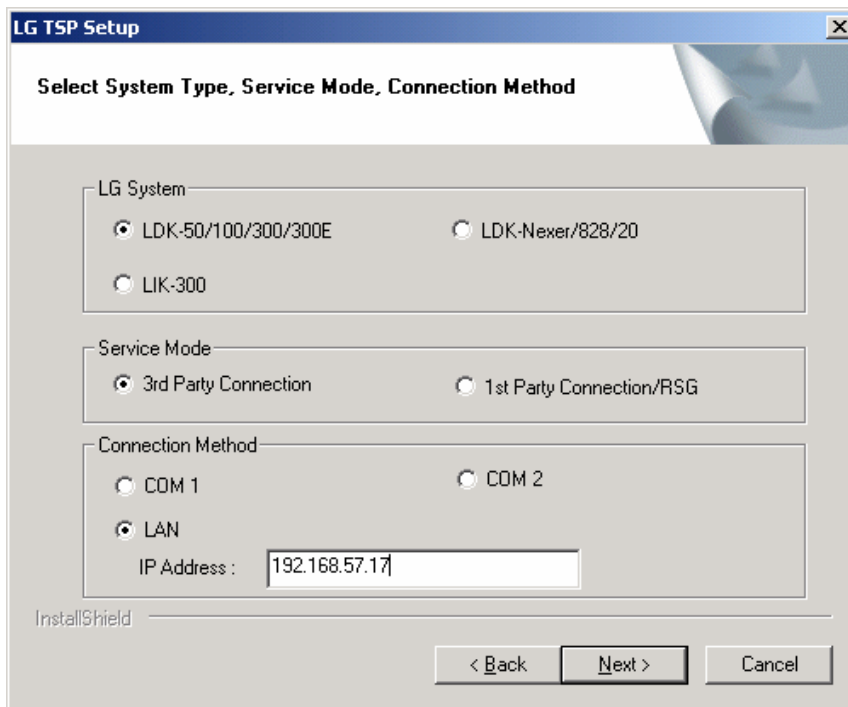
Under the Security folder, select *Trusted Sites* and click the *Custom Level* button.

Select *Prompt* or *Enable* for *Download unsigned ActiveX controls* and for *Download unsigned ActiveX controls*.



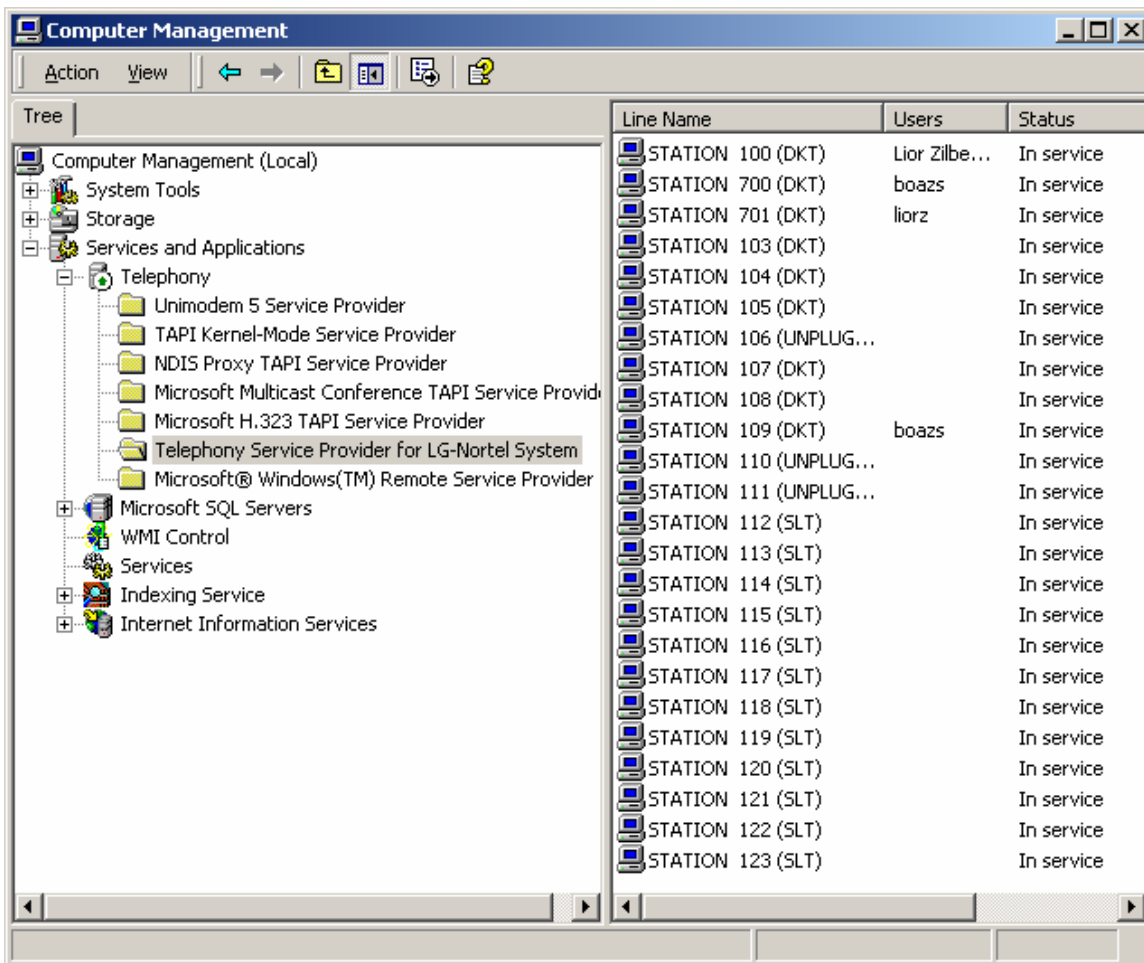
LGN TSP Installation

1. According to LG-Nortel installation manual, you need to install:
 - a. TAPI Lock Key
 - b. LANU on MPB (Only for LDK100)
2. Setup
 - a. Select system type
 - b. Select 3rd Party Connection
 - c. Select LAN Mode
 - d. Enter MPB IP address



3. TSP Check

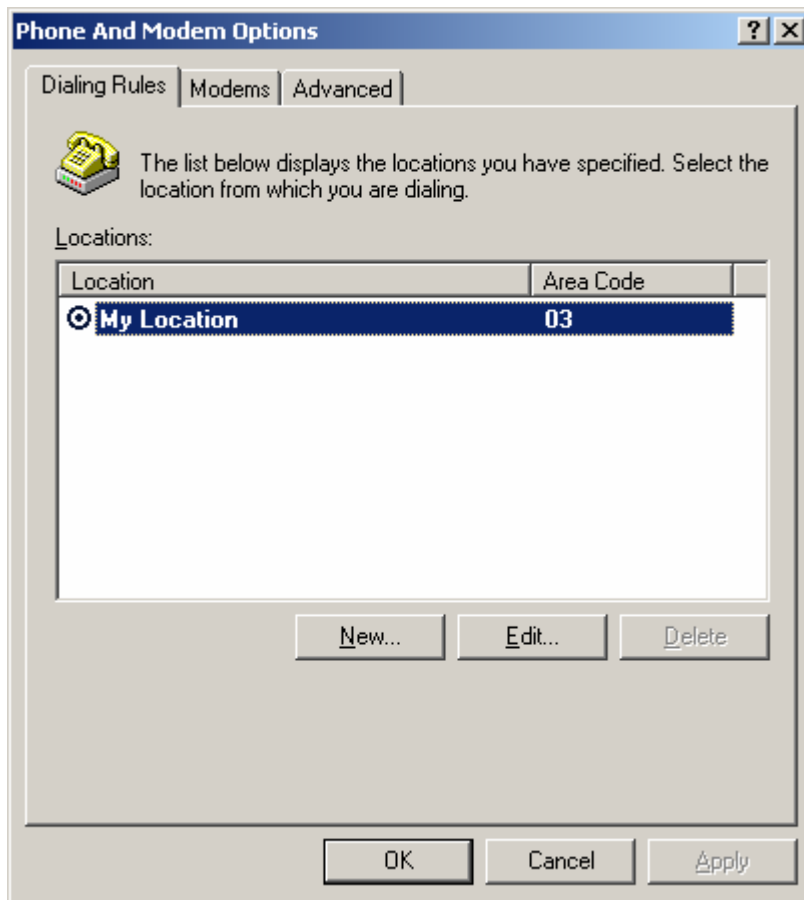
Right click on My Computer, click on Manage, Services and Application, Telephony, Telephony Service Provider for LG-Nortel System. In the right window you will see all the lines configured in the PBX.



4. Phone and Modems Configuration

Go to Start, Settings, Control Panel, Phone and Modems and configure the following properties:

- Country / region
- Area code
- To access an outside line for local calls, dial
- To access an outside line for long-distance calls, dial



Edit Location [?] [X]

General | Area Code Rules | Calling Card

Location name:

Specify the location from which you will be dialing.

Country/region: Area code:

Dialing rules

When dialing from this location, use the following rules:

To access an outside line for local calls, dial:

To access an outside line for long-distance calls, dial:

To disable call waiting, dial:

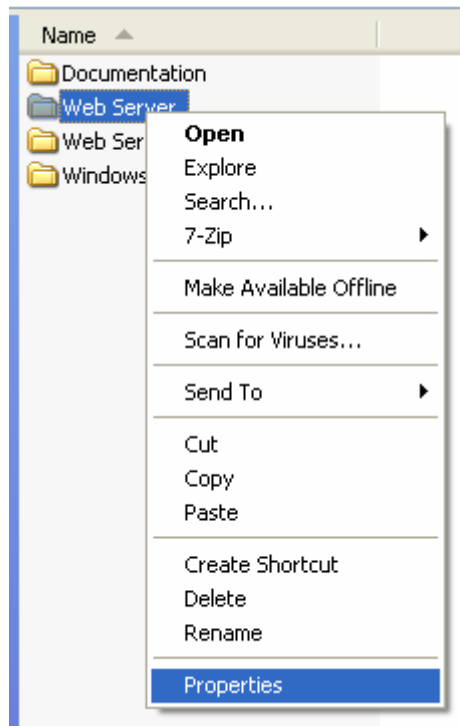
Dial using: Tone Pulse

OK Cancel Apply

Final Tests

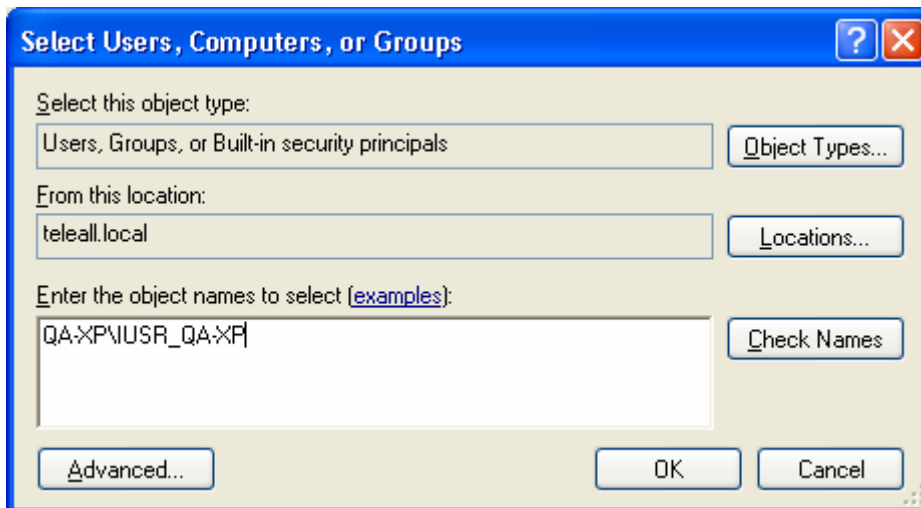
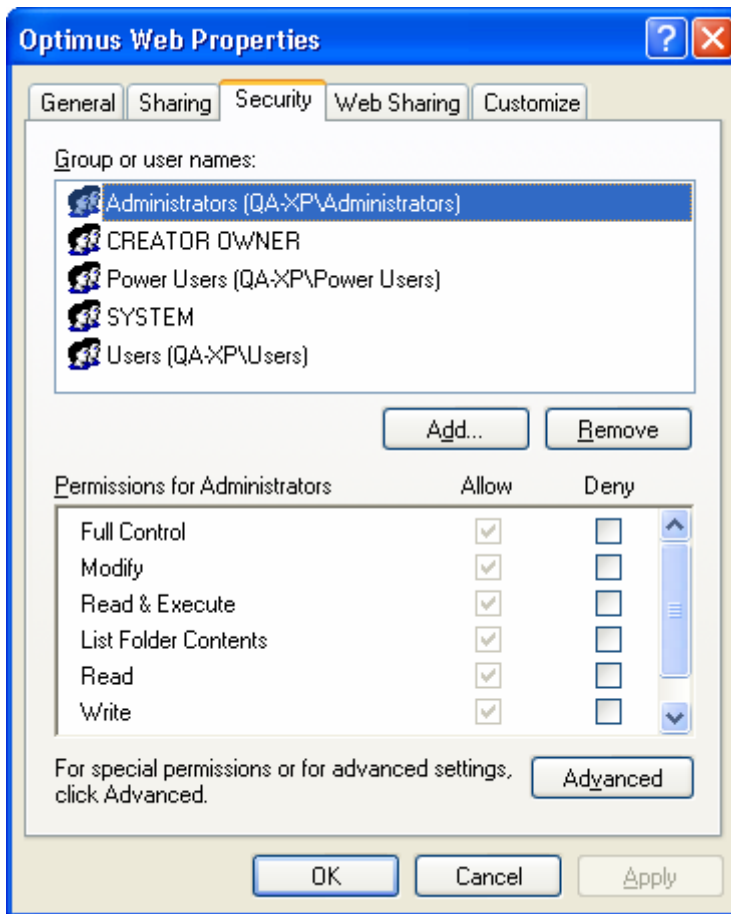
1. In the Optimus Server, please check that the following files In the Optimus Server, check that the following files were given full permissions *for Internet Guest Account* and for *Users*:
 - a. Optimus.mdb
 - b. OptimusLogger.mdb

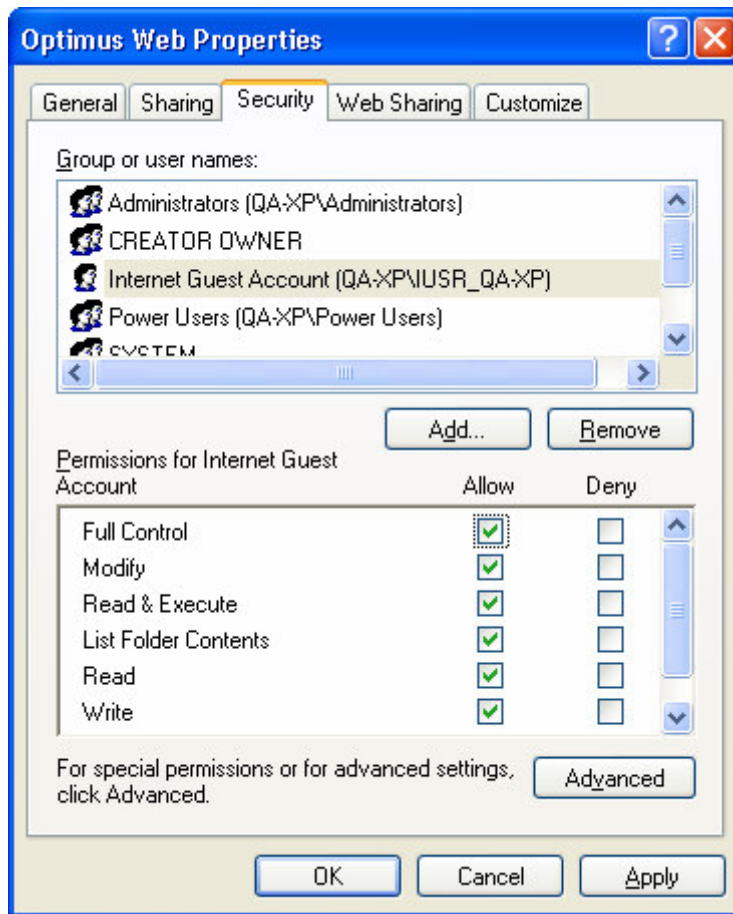
Open the folder C:\Program Files\Aspire AS\Optimus\Web Server, Right-Click the folder and select Properties:

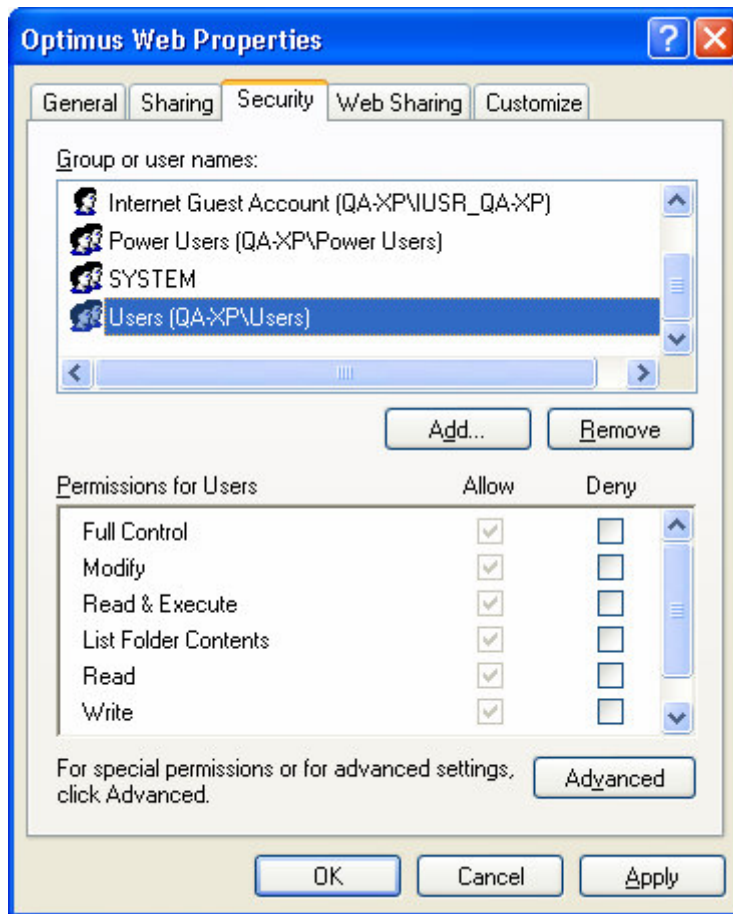


Under the Security tab click the *Add* button and add the following groups

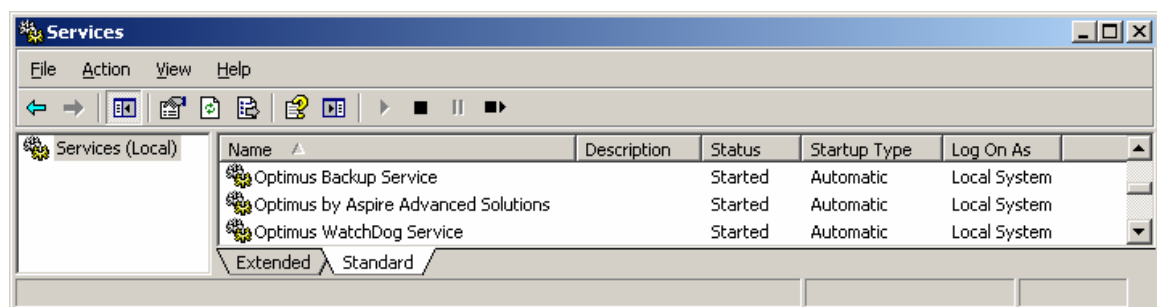
- *Internet Guest Account* (<MACHINE_NAME>\IUSR_<MACHINE_NAME>).
- *Users* (<MACHINE_NAME>\Users).







2. Check that all of Optimus services have been installed, and are configured for automatic startup.



Appendix d

Aspire Advanced Software Solutions & Integration (2005)

OPTIMUS

System Architecture

Revision 1.0

Scope

The purpose of this document is to provide a comprehensive architectural overview of the Aspire Advanced Solutions Optimus product and its supporting infrastructure

The architecture described in this document is the most common and recommended architecture and any changes made with the suggested architecture should be first consulted with the local dealer.

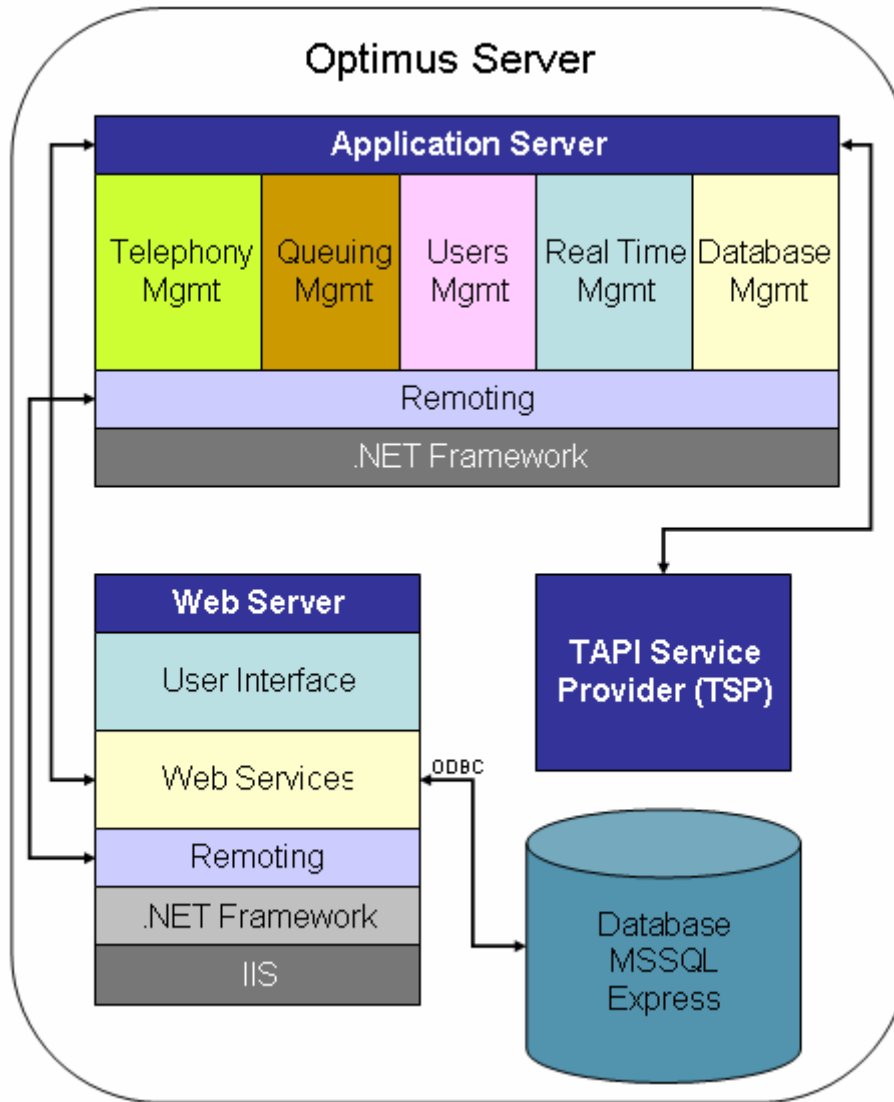
This Optimus document refers to Optimus version 0.20 and no other prior or later versions. For other versions please refer to the correct System Manual.

Clarification: All male-oriented references in this document are intended for both male and female readers and users.

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Optimus Server Architecture Overview

Graphical Overview



Components Description

The Optimus server contains the application server, the web server, the database (MSSQL Express) and the TSP (TAPI Service Provider).

The application consists of several windows services and is written using .Net Framework. The web server contains the graphical user interface and all the web services, both written using .Net Framework. The database is Microsoft SQL Server Express.

The application server and the GUI interact using .NET Remoting (.NET Remoting is an enabler for application communication. It is a generic system for different applications to use to communicate with one another). Although it is recommended to install both on the same machine, the application server and the web server can be located on different computers on the same network

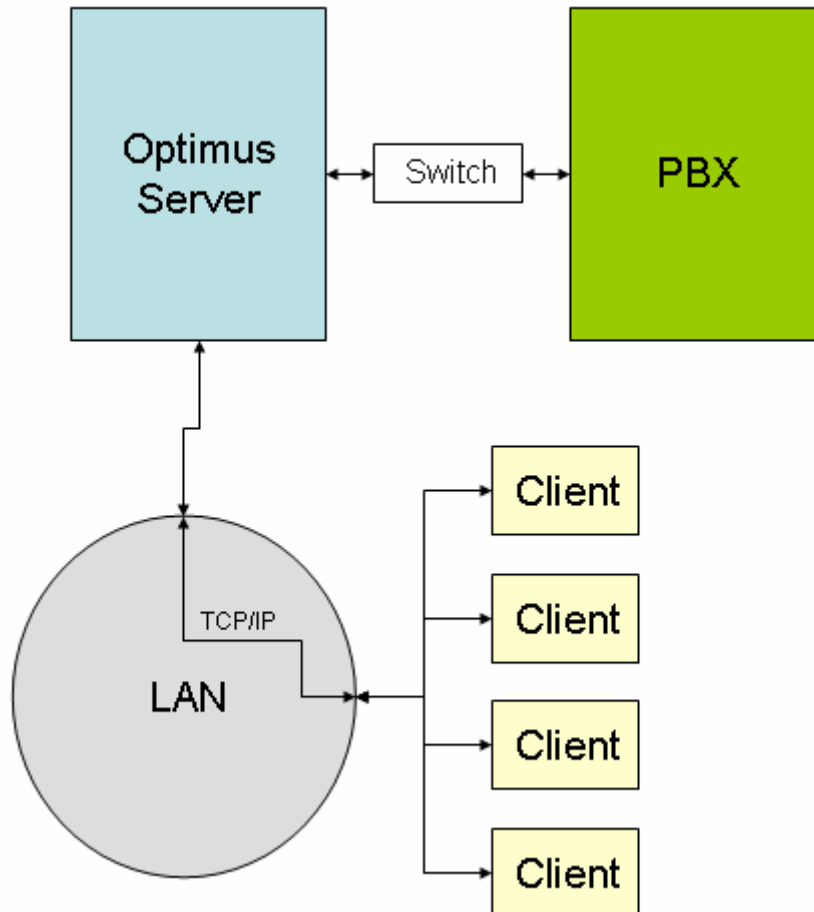
The web server is Microsoft IIS (Internet Information Services) and contains the graphical user interface (GUI) - Optimus Management System and the web services. The GUI requires Microsoft Internet Explorer to be installed on each client machine.

The web services are used for database access via ODBC (Open Database Connectivity).

Optimus server is installed on Microsoft Windows 2000 Server or Microsoft Windows 2003 Server only.

System Architecture Overview

Graphical Overview



Components Description

The Optimus server has two network adapters. The first one is connected to a switch and is used to communicate with the PBX, which is also connected to the same switch. Both IP addresses of the Optimus server and the PBX should be of the same class c IP network.

The second adapter is used to connect the Optimus server to the LAN (Local Area Network). All the client machines are also connected to the LAN and communicate with Optimus using TCP/IP.

Appendix e

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Aspire Advanced Solutions

OPTIMUS

FAQ's and Troubleshooting

Revision 1.3

Scope

The purpose of this document is to provide tips about features that users frequently ask about, and troubleshooting assistance for common problems.

This document is not intended to take the place of training on use of Optimus system, or to substitute any other documentation.

This Optimus document refers to Optimus version 0.20 and no other prior or later versions. For other versions please refer to the correct System Manual.

Clarification: All male-oriented references in this document are intended for both male and female readers and users.

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Troubleshooting

Problem:

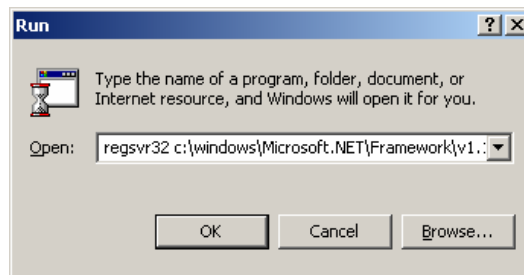
Optimus Management System (web interface) is not loading properly.

Resolution:

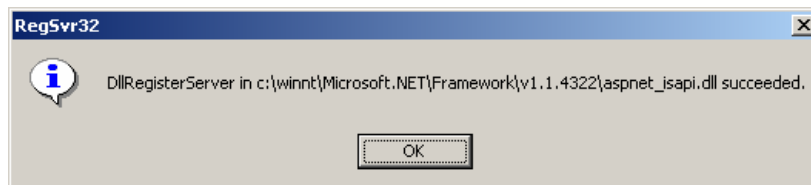
1. Register the asp.net dll file.

In Start->Run run the following command and press enter:

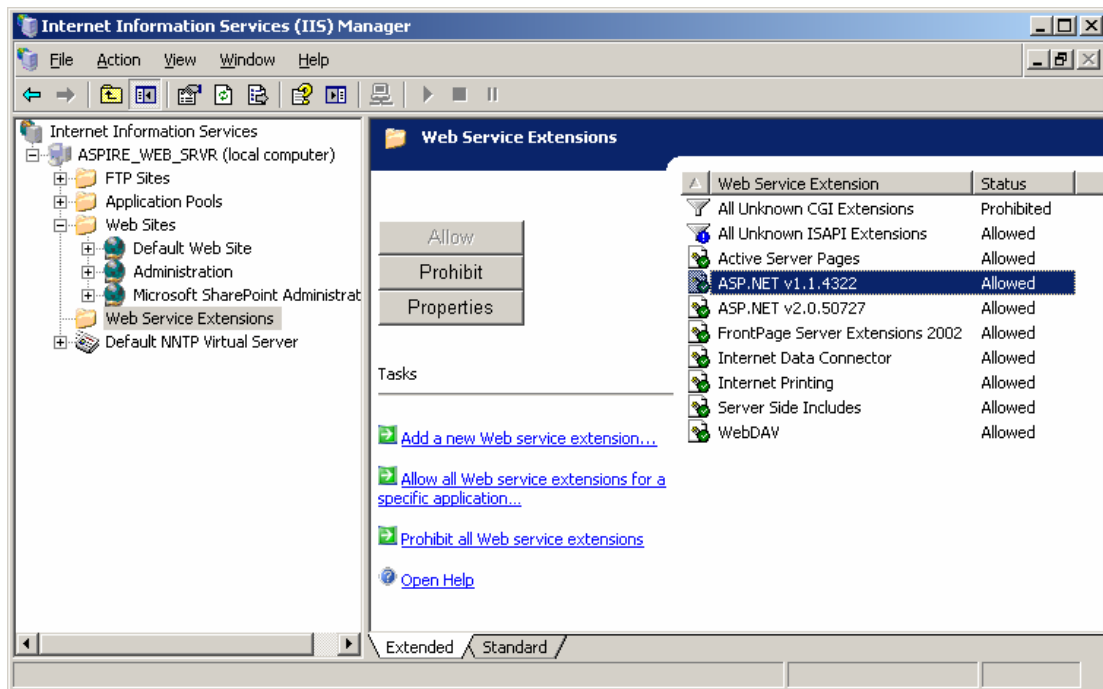
```
regsvr32 c:\windows\Microsoft.NET\Framework\v1.1.4322\aspnet_isapi.dll
```



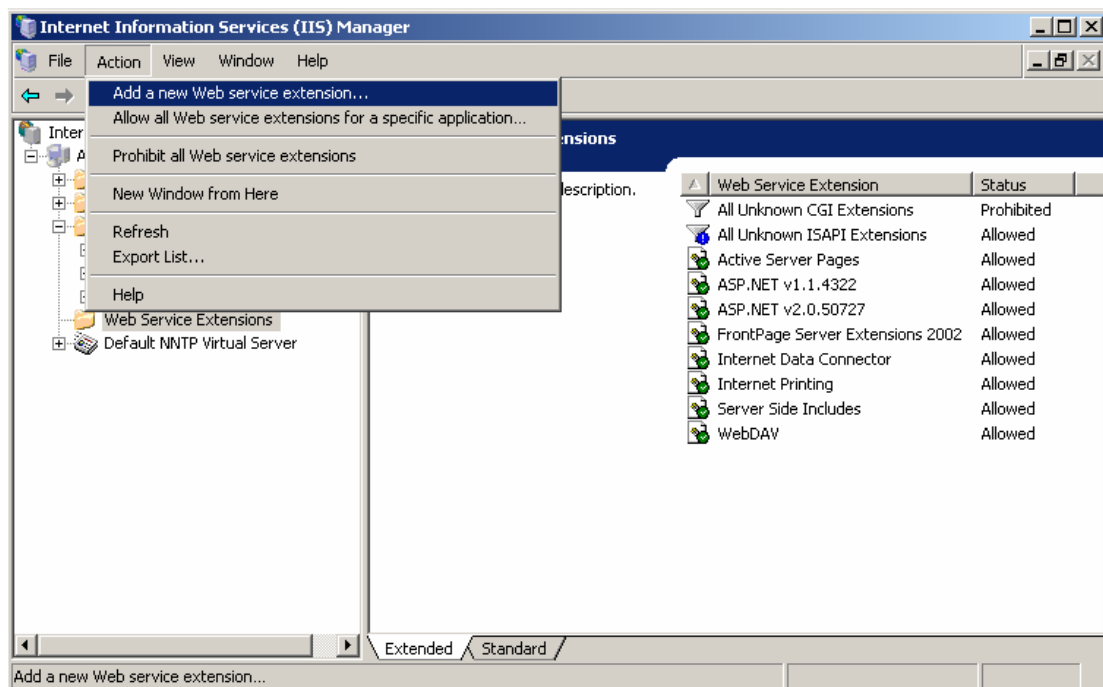
2. Wait until you receive the following message:

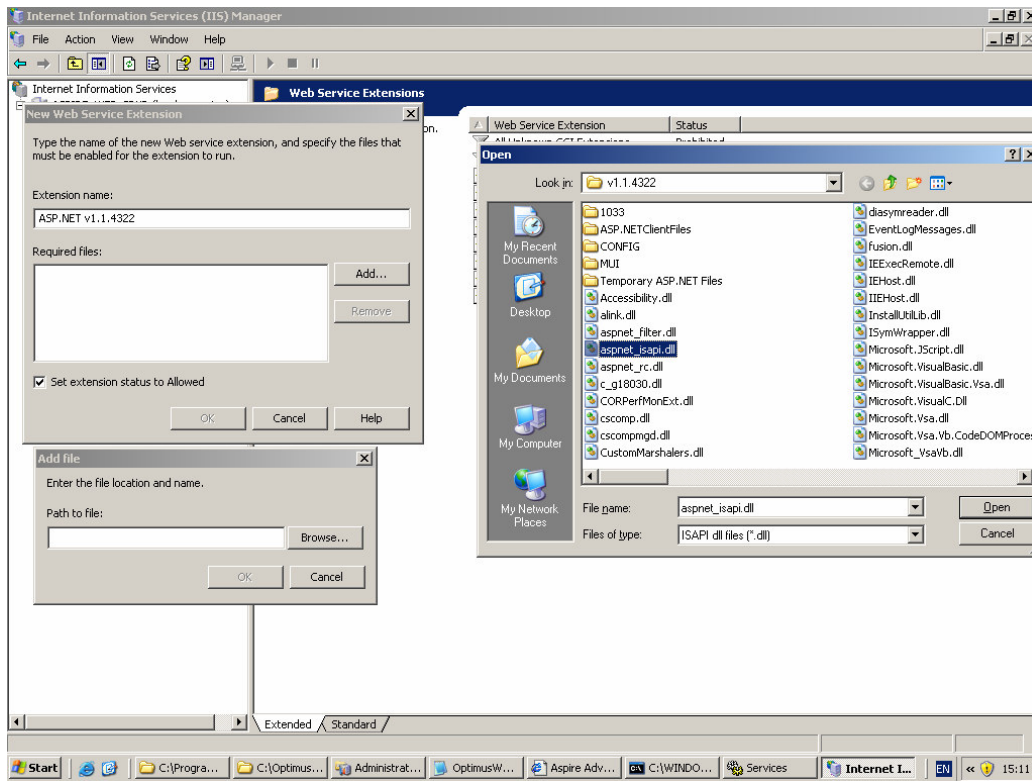


3. Open the IIS Management and make sure that all the web services extensions are set to Allowed.



4. Add a new web service extension (ASP.NET v1.1.4322) and set its status to Allowed.





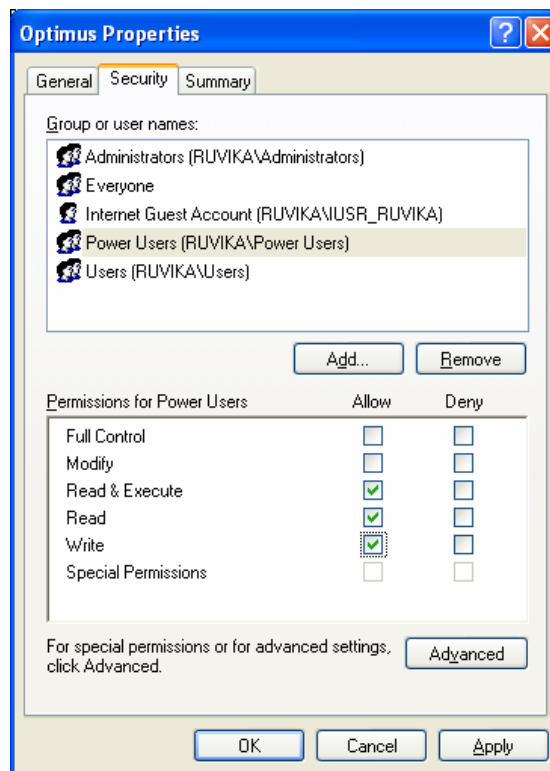
5. Restart the machine.

Problem:

Changes made in user interface (Optimus Management System) are not saved.

Resolution:

1. Add the ASPNET permission entry to the Optimus.mdb file (located under [INSTALLATION_PATH]\Aspire AS\Optimus\Web Server) with Read & Write permissions.
2. Add the Power Users permission entry to the Optimus.mdb file (located under [INSTALLATION_PATH]\Aspire AS\Optimus\Web Server) with Read & Write permissions.
3. Add the Users permission entry to the Optimus.mdb file (located under [INSTALLATION_PATH]\Aspire AS\Optimus\Web Server) with Read & Write permissions.



Problem:

Agent's real time toolbar is not displayed.

Resolution:

In Microsoft Internet Explorer, open the Internet Options from the *Tools* menu. Under the *Security* folder, select *Trusted Sites* and click the *Sites* button. Add the computer name where the Optimus server has been installed, for example: `http://OptimusServer`, uncheck the *Require Server Verification* and select *Add* and then *OK*. Under the *Security* folder, select *Trusted Sites* and click the *Custom Level* button. Select *Prompt* or *Enable* for *Download unsigned ActiveX controls* and for *Download unsigned ActiveX controls*.

Resolution:

In case there is a firewall between the Optimus server and the client machines, open the following port numbers configured in the *Optimus Management System*:

- *Real Time Port Number* under the *Agent* menu (under *Management, Configuration*).
- *Shift Manager Real Time Port Number* under the *Real Time* menu (under *Management, Configuration*).

Problem:

There are no available lines in the Optimus Management System under *PBX Lines* menu or *Extensions* menu, or in the Optimus Maintenance application under the *Lines* tab.

Resolution:

Install the TSP as described in the *Installation Guide for Optimus* and perform the necessary steps to assure proper installation.

Resolution:

Start Optimus Engine main service.

Resolution:

From the Start menu select Run and type the following command:

```
tcmsetup /c /x [OPTIMUS_SERVER_NAME]
```

Note: If Optimus is running you must stop it first. Executing this command while the Optimus is running might cause Optimus to stop working.

Resolution:

Restart the Telephony service.

Resolution:

Restart the server.

Resolution:

Check the *Enable telephony server* in the Telephony Properties screen.

Resolution:

Remove the TSP (Telephony Service Provider for LG-Nortel System) from the *Phone and Modems Options* screen (under the Advanced tab) and click on the *Ok* button. Add the TSP again from the same screen and click on the *Ok* button.

Problem:

Different screens in the user interface (Optimus Management System), such as Agent's Toolbar, reports or real time reports, are not opened.

Resolution:

Disable ant pop up blocker in Microsoft Internet Explorer. It can be either an Internet Explorer built in pop up blocker or an add-on such as Yahoo! Toolbar or Google toolbar.

Problem:

General telephony problems occurs (such as failure to answer calls, extension state is invalid)

Resolution:

Problems like these are not common and should be handled carefully. If the problem persists then contact the product vendor.

- If there is a firewall between the TSP and the Optimus (in case they are installed on different machines) or there is a firewall on the Optimus server, open ports 251 and 253 which are used for TAPI messages.
 - * Using a firewall between the TSP and the Optimus server is not recommended and might cause unexpected results.
- Open the *Optimus Maintenance* application. From the *Lines* tab restart the necessary lines. If the problem is with a specific extension or a PBX line then it is better if you restart the specific line only.
- From the *Services* tab stop the *Optimus Engine* service and start it again.

Frequently Asked Questions (FAQs)

FAQ:

When working in Terminal Server mode, sometimes the clients do not have a unique IP address.
How can I define multiple extensions?

Answer:

When working in Terminal Server mode don't supply the Terminal Server IP address as the extension Host Name, but instead assign a dummy name for each station.

Optimus Management System Messages Description

Message:

Could not establish a connection with the Optimus server (2812)

Description:

Optimus Management System fails to connect to the Optimus server.

- Check if the Optimus is running.
- If you have re-configured the IP address or the port of the Optimus server then you must close the Optimus Management System and open it again.

Message:

The agent is already logged in (2852)

Description:

An agent who is already logged in to one extension is trying to log in to another extension. An agent can not log in to two extensions at the same time.

Message:

Another agent is already logged in on this host (2853)

Description:

An agent is trying to log in to an extension which another agent is already logged in to. Two agents can not log in to the same extension at the same time.

Message:

Line is already exists (2871)

Description:

You have tried to add a line which is already exist in the Optimus server.

Message:

Line does not exist in the TAPI server (2872)

Description:

You have tried to add a line which does not exist in the Optimus server.

- Check that the telephone number is correct.
- Restart the TSP and the Optimus server.

Message:

Line open failure (2873)

Description:

The Optimus server failed to open the line.

- Check that the line exists in the TSP.
- Restart the TSP and the Optimus server.

Message:

You can not add another extension according to the product license. If you wish to add more extensions please contact the product vendor (2875)

Description:

You have reached the limit of extensions according to the product key. If you wish to add more extensions you should contact your product vendor.

Message:

IP is already exists (2876)

Description:

You are trying to add a new extension with an IP address which is already exists in another extension.

Message:

Could not add the rule because another rule for the same CLID is already defined (2891)

Description:

You are trying to add a new rule based on a caller Id while there is another rule based on the same caller Id.

Message:

Could not add the rule because another rule for the same DNIS is already defined (2892)

Description:

You are trying to add a new rule based on a DNIS (Dialed Number Identification Service) while there is another rule based on the same DNIS.

Message:

Could not add the rule because another rule for the same DNIS and CLID is already defined (2893)

Description:

You are trying to add a new rule based on a DNIS (Dialed Number Identification Service) and a caller Id while there is another rule based on the same DNIS and caller Id.

Message:

Flow is already exists (2894)

Description:

You are trying to add a new flow while there is already a flow with the same parameters.

Message:

The flow rule is illegal. Please check and try again (2895)

Description:

You are trying to add a new flow while there is already a flow with the same parameters or the flow causes a circular call flow.

Message:

User is already exists (2911)

Description:

You are trying to assign a user to group who is already assigned to this group.

Message:

Group is already exists (2912)

Description:

You are trying to assign a user to group who is already assigned to this group.

Message:

Queue is already exists (2913)

Description:

You are trying to assign a queue to group who is already assigned to this group.

Message:

You can not remove a default Queue (2914)

Description:

You are trying to delete a queue which is defined as the default queue. First define a different queue as the default queue and then try to delete the queue again.

Message:

Db connection is already exists (2931)

Description:

You are trying to add a database connection while there is already a database connection defined to the same database.

Message:

Could not connect to the database. Error description: (2933)

Description:

The Optimus server failed to connect to the database. The system error message will be concatenated to this message.

- Check the connection string.

Message:

An error occurred while trying to execute the SQL for call routing. Error description: (2934)

Description:

The Optimus server failed to execute the SQL statement against the database. The system error message will be concatenated to this message.

- Check the SQL statement syntax and parameters.

Message:

An error occurred while trying to execute the routing stored procedure for call routing. Error description: (2935)

Description:

The Optimus server failed to execute the stored procedure against the database. The system error message will be concatenated to this message.

- Check the stored procedure syntax and parameters.