



Internet Content Inspector ICI-1000 / ICI-2000 User Manual

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The Management Team of Digital Data Communications Asia Ltd

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Table of Contents

INTRODUCTION	6
WHO NEED THE ICI SYSTEM	7
APPLICATION AND IMPLEMENTATION	
UNPACKING & INSTALLING	10
PACKING CHECKLIST	10
FRONT PANEL	10
REAR PANEL	10
REQUIREMENT	11
INSTALLATION	11
Default Settings	11
GETTING STARTED	12
WEB MANAGEMENT INTERFACE	12
System Main Page	13
ICON BAR	14
Main Page - Total Throughput Statistical Report	15
INTERNET CONTENT RECONSTRUCTION	22
EMAIL	22
POP3	
IMAP	
SMTP (Outgoing)	
Webmail Read	
Webmail Sent	32
Instant Messaging & Chat	34
Windows Live Messenger (aka MSN)	34
ICQ	39
Yahoo Messenger	
QQ Messenger *	43
UT Chat Room	48
Skype *	49
Gtalk (in HTTP Gmail)	50
Internet Relay Chat – IRC	51
FILE TRANSFER	
File Transfer Protocol - FTP	
Peer to Peer File Sharing – P2P	54
HTTP	
HTTP Link	
HTTP Content	
HTTP Reconstruct	
HTTP Upload/Download	
HTTP Video Streaming (FLV Video)	
HTTP Request	
HTTP Social Network Sites	
TELNET	
OTHERS	
Online Games	
VoIP (Optional Purchase License)	
Unknown Connection	
SYSTEM SETTING	_
Network Setting	
Network Setup DNS Setup	
121V.1.35 111U	

Shutdown and Reboot	
System Time Setup	
Filter Setup	
Storage	
Services	
Edit Password	
Backup Data	
Disk Space Control	
System Status	
Port Number	
Online IP	
Login List	
Update	
Maintenance	
Domain	
SYSTEM TOOLS	
Delete Data	
Authority	
Storage Alert	
Throughput Alert	
AD Import	
REGISTRATION	
DATA SEARCH	_
Full Text Search	
Similar Search	
Data Search – Conditional or Parameter Search	
Association Search	
Captured File List	
Bookmark	
SEND MAIL SERVICE	
Alert with Content	
Alert Mail Box	
Alert Sensitive File	
Report Management	
Event Management	
Event Trigger Management	
STATISTICAL REPORTS	
Conditional Reports (Single Report)	
Conditional Report (Group Report)	
Network Services Usage Report	
Network Services Usage Weekly Report	
Top Websites Report	
Online Users Report	
Last Month Key Word Trend Report	
Daily Report (Excel Log Report)	
PPENDIX A: P2P SUPPORTED	
PPENDIX B: ONLINE GAMES SUPPORTED	170
PPENDIX C: RETRIEVE DATA LOG VIA FTP	
PPENDIX D: FIELD DEFINITION OF FULL-TEXT SEARCH FUNCTION	
XTENSION – QUERY SYNTAX DEFINITION	
Overview	
TERMS	
FIELDS	
TERM MODIFIERS	177

Wildcard Searches	
Fuzzy Searches	
Proximity Searches	
Range Searches	
Boosting a Term	
BOOLEAN OPERATORS	
AND	
+	
NOT	
	180
GROUPING	180
FIELD GROUPING	
ESCAPING SPECIAL CHARACTERS	180

Introduction



LevelOne Internet Content Inspector, ICI empowers your business security and operations teams by providing granular data monitoring and precise packet and session reconstruction capabilities. The solution is designed to combine process and technology into a single effective system for network forensics. Business can for the first time embrace Web 2.0 and maintain complete visibility and control, while significantly reducing total cost of ownership through device consolidation. ICI offers real innovation by enabling unprecedented visibility and control of applications and content with no performance degradation. It identify applications accurately - regardless of port, protocol, evasive tactic or SSL encryption – and scan content to stop threats and prevent data leakage.

It intercepts, captures and reconstruct Internet activities such as Email (POP3, SMTP, IMAP), Webmail Read and Sent (Yahoo Mail, Gmail, Windows Live Hotmail, Seednet etc.), Instant Messaging or Chat (Yahoo, Windows Live Messenger or MSN, ICQ, AOL, QQ, UT Chat Room, IRC, Gtalk, Skype Voice Call Duration Log), HTTP (URL Link, Content, Upload and Download, Video Streaming), File Transfer (P2P File Sharing, FTP), Online Games, VoIP (Yahoo Messenger) and Webcam (Yahoo Messenger and Windows Live Messenger - MSN), VoIP (RTP Voice Call) and Telnet sessions. ICI system encourages efficiency, prevents company network resource from abuses by employees, tracing culprits of information and confidential data leakage, and monitors activities and online behaviour of employees.

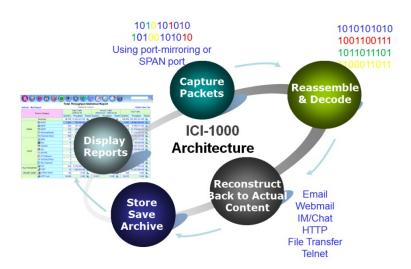
Ethernet LAN interception is an important approach to gather information of communications and digital evidence. Ethernet LAN interception solutions capture all the traffic on the LAN network and monitor the Internet activities. It is capable of live intercepting with real time capturing and decoding/reconstruction, category classifying, behaviour analysing, data mining, reporting with statistics etc.

ICI comes with wide variety of management and administrative functions. It provides you various types of report with Top-Down View. Reports that can be created include Total Throughput Statistical Report, Network Service Report (Daily, Weekly basis), Top Websites etc. All statistics can be displayed in per IP Address or per User Account basis.

ICI also provides varieties of search functions. It provides Free Text Search (search by Key Words with Boolean support), Conditional Search, Similar Search and Association with Relationship Search. It also comes with Alert and Notification (Throughput, Conditional and Key Words Alert) functions that allow the network Administrator to setup different alert rules and parameters. This allows alert to be triggered (email to be sent to Administrator) once the specified content is found in the captured and reconstructed content.

Backup function allows user to back up the captured raw data files or reconstructed contents. User can setup auto backup to backup these files to external drive (NAS or SAN) through FTP upload method. Besides, user can opt for manually backup these files by burning them into CD/DVD or even downloaded them to a local hard drive/PC.

Other functions available are like Bookmark, Capture File List (Comparing the content of two files), Online IP List, Authority Assignment, Syslog Server etc. Others functions include hashed export (backup), file content comparison etc.

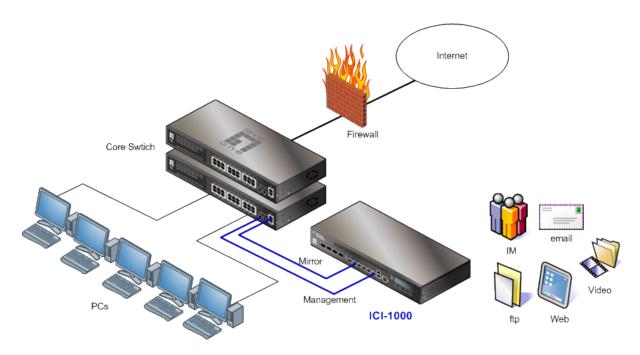


Who Need the ICI System

- Financial, Banking and Investment Organisations where all Internet transactions and communications need to be archived (Record Keeping).
- Marketing organizations, design house, high technology and R&D firms where critical confidential information need protected.
- Schools, colleges, institutions and universities that would like to monitor students and staffs online activities and behaviour.
- Government agencies and ministries such as Police Intelligence, Military Intelligence, Secret Service Agencies, National Security Agencies, Criminal Investigation Agencies, Counter Terrorism Agencies etc.
- Any company or organization that wants to monitor, backup and archive their daily Internet transaction and data.

Application and Implementation

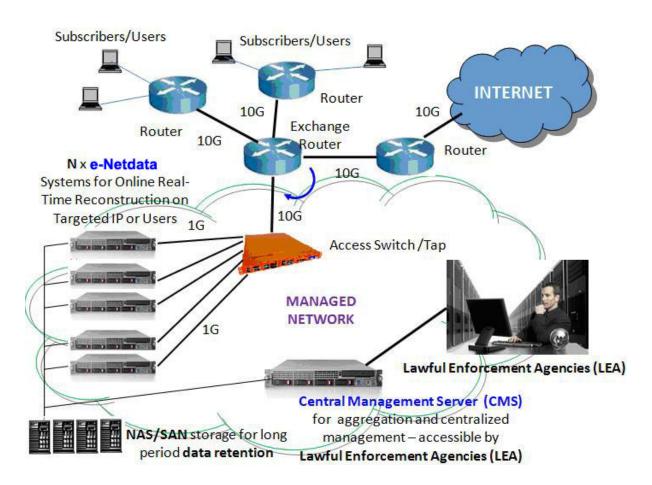
The diagram below is a common ICI application and implementation diagram which can be applied to any organization networks. ICI uses sniffer technology to sniff or capture network Internet packets through a port-mirroring capable switch (normally a smart switch or layer 2/3 switch; a HUB can be used too as HUB broadcast traffic to all ports). It then parses (decodes and reconstructs) the captured raw data packets, store them in system database and displays the reconstructed data with reports in original and readable format in the Web GUI.



Ethernet LAN Organization Network Monitoring and Interception

ICI can also be implementation at network with huge volume of traffic throughput such as mass interception and lawful interception at Telco or ISP networks. This implementation is normally for lawful enforcement agencies (LEA) such as cyber security agencies, national security agencies, criminal investigation bureau, police and military intelligence. Please contact LevelOne sales team for more details

sales@level1.com



Telco or ISP lawful Internet Interception

Unpacking & Installing

Packing Checklist

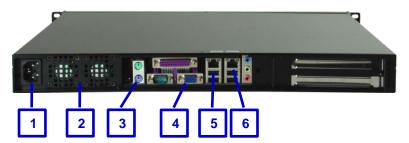
- √ 19 inch 1U Rack mountable Server x 1
- Quick Installation Guide x 1
- ✓ CD Manual x 1
- ✓ Mounting Bracket set x 1 ✓ Power Cord x 1

Front Panel



- 1. Power LED
- 2. HDD LED

Rear Panel



- 1. Power Socket
- 2. Power Supply Unit
- 3. PS/2 KB & Mouse (for local console)
- VGA Display (for local console)
 Monitor Ethernet Port
- 6. Management Ethernet Port

Requirement

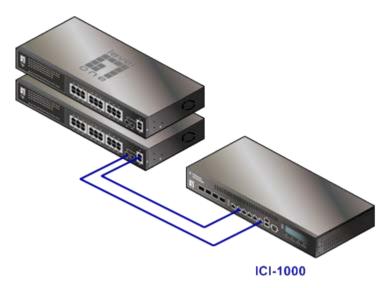
In order to get the ICI to capture your network activities successfully, a **Port-Mirroring** feature on the network Ethernet switch is must. User can monitor traffic from any source port to a target port for real-time analysis. Attach the ICI to the target port and study the traffic crossing the source port in a completely unobtrusive manner. Most the Web Smart and fully Managed Layer2 Ethernet switches support the **Port-Mirroring** feature

✓ Web Smart or Fully Managed Layer2/3 Switch with Port-Mirroring feature

For the best performance and keep disruption minimal, we introduce the **Mirror** mode implementation only which provides the Real-time Reconstruction and keep disruption minimal at the same time. The captured packets are saved in PCAP format

Installation

- 1. Connect the power cord to ICI power socket on the rear panel
- 2. Patch lead between Switch Mirror port and ICI Monitor port
- 3. Patch lead between Switch port (any available port) and ICI Management port



Default Settings

IP	192.168.1.60
Username	root
Password	000000 (six zero)

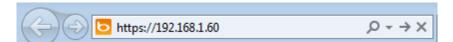
Note: Internet Explorer (IE ver6, 7 and 8) are recommended web browser for Web GUI management access of ICI system.

Getting Started

This chapter shows how to manage the ICI system via standard Web Browser over local network, also a quick guide about each function button from menu bar, as well as the examples of feature-rich of report feature.

Web Management Interface

1. Use Internet Explorer (IE) Web Browser to access ICI system web management site. ICI system uses port 443 for secure web access. Please remember to key in https://x.x.x.x, for example https://192.168.1.60 (which is the default login).



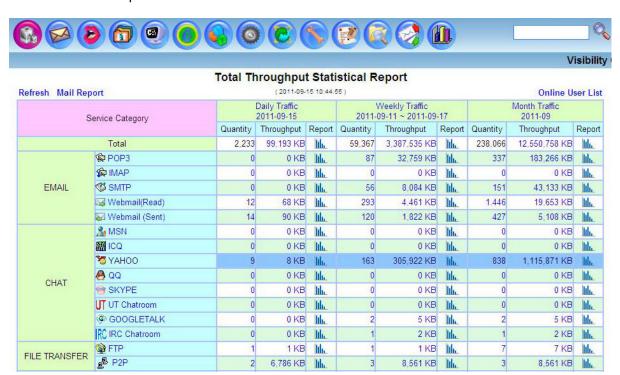
- 2. Before you use this system, please make sure you have Java applet installed. Read the instruction on "Before You Use This System" at the login page.
- 3. Username: root & Password: 000000 (six zero)
- 4. Choose your preferred language [Traditional Chinese] or [English] and then click on the login button.



Note: Internet Explorer (IE ver6, 7 and 8) are recommended web browser for Web GUI management access of ICI system.

System Main Page

The navigation icon bar is on the top section of the Web Management GUI. ICI Homepage provides information on the Total Throughput Statistical Report (as shown in diagram below) with Top-Down and Drilled-Down capabilities.



Icon Bar



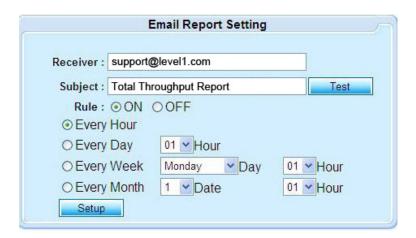
Icon	Function	Icon	Function
	EMAIL RECORD	©	SYSTEM STATUS
(2)	CHAT RECORD		SYSTEM TOOLS
	FILE TRANSFER RECORD		REGISTER
	OTHERS RECORD		DATA SEARCH
	HTTP RECORD		ALERT SERVICE
3	TELNET RECORD		REPORT
(3)	SYSTEM SETTING		HOMEPAGE/LOGOUT

Main Page - Total Throughput Statistical Report

Total Throughput Statistical Report provides Daily, Weekly and Total Traffic statistic of different Internet service categories for the organization network. It shows the total traffic amount usage by the entire network as well as breaks them out into different service categories. Online User List will show the List of users (IP Address and Account).

	oort			15 11:07:					Control of the Contro	lser Lis
Service Category			Daily Traffic 2011-09-15		Weekly Traffic 2011-09-11 ~ 2011-09-17			Month Traffic 2011-09		
		Quantity	Throughput	Report	Quantity	Throughput	Report	Quantity	Throughput	Report
		3,026	137,549 KB	lth	60,161	3,425,891 KB	Ith	238,861	12,589,114 KB	III
	POP3	0	0 KB	lilia	87	32,759 KB	Ith	337	183,266 KB	III
EMAIL	₩ IMAP	0	0 KB	سالل	0	0 KB	Ith	0	0 KB	III
	ॐ SMTP	1	809 KB	Illia	57	8,893 KB	Ith	152	43,942 KB	111
	₩ebmail(Read)	23	164 KB	Ithu	304	4,557 KB	Ith	1,457	19,749 KB	III
	Webmail (Sent)	16	98 KB	Ith	122	1,830 KB	Ith	429	5,116 KB	lili
	<u></u> MSN	0	0 KB	lilia	0	0 KB	Ith	0	0 KB	lih.
	₩ ICQ	0	0 KB	lth	0	0 KB	Ith	0	0 KB	III
	73 YAHOO	14	9 KB	lilia	168	305,923 KB	Ith	843	1,115,872 KB	III
CHAT	⊕ QQ	0	0 KB	lilia	0	0 KB	Ith	0	0 KB	Ithe
CHAI	⊗ SKYPE	0	0 KB	Illu	0	0 KB	Ith	0	0 KB	lilia
	UT UT Chatroom	0	0 KB	Illia	0	0 KB	Ith	0	0 KB	III
	GOOGLETALK	0	0 KB	Ith	2	5 KB	Ith	2	5 KB	Illia
	RC IRC Chatroom	0	0 KB	Illia	1	2 KB	III	1	2 KB	lilia
LE TRANSCER	TP FTP	1	1 KB	Illia	1	1 KB	III	7	7 KB	lth
LE TRANSFER	₽ P2P	2	6,786 KB	Illia	3	8,561 KB	lth.	3	8,561 KB	Illia

Mail Report allows Administrator to send different reports such as Total Throughput Statistical Report, Online IP List etc. to the specific Email account immediately or either by hourly, daily, weekly or monthly basis as shown below.



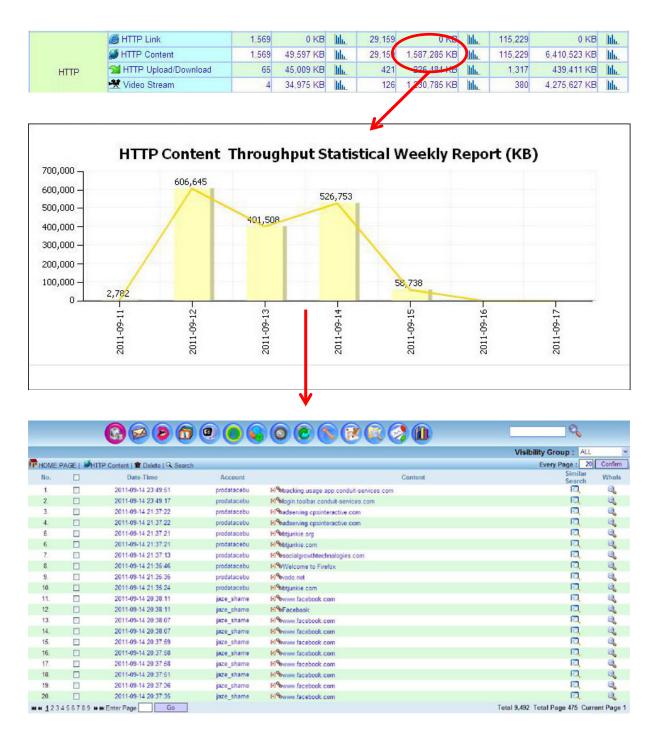
Example 1:

Click on the Email - POP3 Quantity of Daily Traffic, it will List down the entire POP3 Emails in the database.



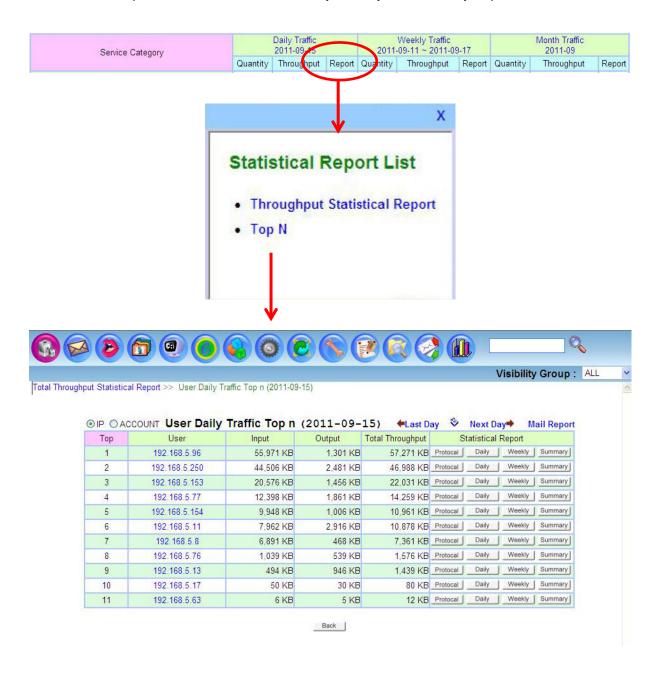
Example 2:

Click on the HTTP – HTTP Content weekly traffic throughput (KB), it will display the bar chart of the HTTP Content traffic for the entire week (7 days). By clicking bar chat (specific day), it will lead you to that day details content.

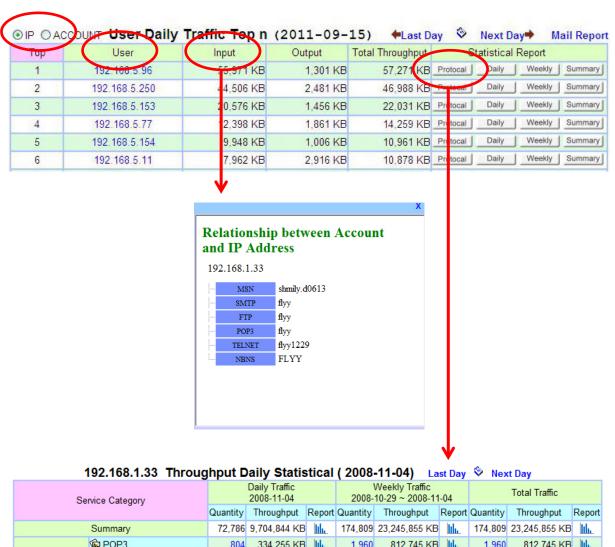


Example 3:

Click on the Daily Traffic – Summary Report, it will pop out Statistical Report List window and you can select to click Throughput Statistical Report or Top N report. Click on the Top N, it will display the User Daily Traffic Top N by Listing the top user IP with information such as Who is?, Throughput (KB) and Statistical Report which includes Protocol Daily, Weekly and Summary Report.

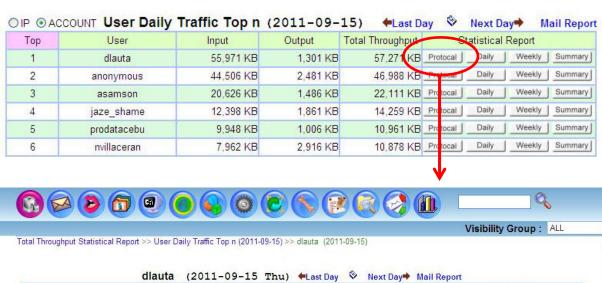


Click on Who is? This will display the user (IP) relationship with username, user login etc. Click on Protocol, it will display all applications and throughput (KB) used by this user (IP).



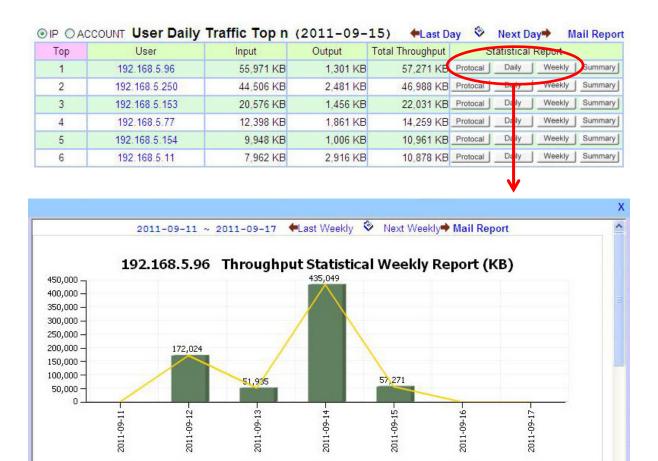
Service Category		Daily Traffic Service Category 2008-11-04			Weekly Traffic 2008-10-29 ~ 2008-11-04				Total Traffic	
	,	Quantity	Throughput	Report	Quantity	Throughput	Report	Quantity	Throughput	Report
	Summary	72,786	9,704,844 KB	lilu	174,809	23,245,855 KB	lili	174,809	23,245,855 KB	lth
	POP3	804	334,255 KB	lilia	1,960	812,745 KB	lili	1,960	812,745 KB	lih.
		0	0 KB	lilu	0	0 KB	lilu	0	0 KB	lth
EMAIL		463	115,609 KB	lilia	1,112	277,069 KB	lth	1,112	277,069 KB	lth
	™ Webmail(Read)	1,454	9,279 KB	lilu	3,487	22,321 KB	lili	3,487	22,321 KB	lth.
	Webmail (Sent)	8	109 KB	lilia	17	351 KB	lth	17	351 KB	lth
	<u></u> MSN	4,114	58 KB	lilu	10,052	141 KB	lili	10,052	141 KB	lth
	A ICQ	812	968 KB	lili	1,951	4,845 KB	lilia	1,951	4,845 KB	lth
	TAHOO YAHOO	0	0 KB	lilu	0	0 KB	lilu	0	0 KB	lth
CHAT	🚇 QQ	1,566	13,942 KB	lilia	3,753	33,413 KB	lth	3,753	33,413 KB	lth
CHAI	⊗ SKYPE	426	36,492 KB	lilu	1,002	81,341 KB	lili	1,002	81,341 KB	lth
	UT Chatroom	4,499	14,872 KB	lilia	10,817	35,704 KB	lih.	10,817	35,704 KB	lth.
	GOOGLETALK	0	0 KB	lilu	0	0 KB	lili	0	0 KB	lth
	RC Chatroom	116	34 KB	lth	277	84 KB	lth	277	84 KB	lth
FILE TRANSFER		689	6,373,223 KB	lilu	1,652	15,233,539 KB	lth	1,652	15,233,539 KB	lth
FILE TRANSFER	₽ P2P	522	305,449 KB	lilia	1,252	732,104 KB	lth	1,252	732,104 KB	lth
ONLINE GAME	Online Game	58	36 KB	lili.	139	86 KB	lilia	139	86 KB	lth
	HTTP Link	24,649	36 KB	lilia	59,277	88 KB	lilia	59,277	88 KB	lth
НТТР		23,879	796,771 KB	lilia	57,427	1,933,883 KB	lilia	57,427	1,933,883 KB	lth.
ппР	✓ UTTD U=13/D=13	0.040	704 FF0 I/D	hat	40.000	4 070 000 1/0	list	40.000	4 070 000 1/0	li.i

Besides generating report by IP, Administrator can also generate report by Account basis.



Service Category		Daily Traffic 2011-09-15			Weekly Traffic 2011-09-11 ~ 2011-09-17			Month Traffic			
		Quantity	Throughput	Report	Quantity	Throughput	Report	Quantity	Throughput	Repor	
	Total	168	57,271 KB	lth	3,740	716,279 KB	Ith	10,701	1,536,009 KB	111.	
	POP3	0	0 KB	lth	0	0 KB	lth	0	0 KB	lih.	
		0	0 KB	lth	0	0 KB	lth	0	0 KB	III	
EMAIL	ॐ SMTP	0	0 KB	lth	0	0 KB	lth	0	0 KB	lile	
	₩ Webmail(Read)	0	0 KB	III	0	0 KB	Ith	1	51 KB	lih.	
	Webmail (Sent)	0	0 KB	Ith	0	0 KB	lth	0	0 KB	111	
CHAT	<u></u> MSN	0	0 KB	Ith	0	0 KB	lth	0	0 KB	111	
	₩ ICQ	0	0 KB	lth	0	0 KB	lth	0	0 KB	Illu	
	7 YAHOO	1	1 KB	Ith	8	9 KB	Ith	35	37 KB	Illi	
	⊕ QQ	0	0 KB	lth	0	0 KB	Ith	0	0 KB	Illu	
	⊗ SKYPE	0	0 KB	lth	0	0 KB	Ith	0	0 KB	Ith	
	UT Chatroom	0	0 KB	lth	0	0 KB	lth	0	0 KB	lih	
	GOOGLETALK	0	0 KB	Ith	0	0 KB	Ith	0	0 KB	Illu	
	RC IRC Chatroom	0	0 KB	lth.	0	0 KB	lth	0	0 KB	III	
FILE TRANSFER	∰ FTP	0	0 KB	lth	0	0 KB	Ith	0	0 KB	Ith	
FILE IRANSFER	P2P	0	0 KB	lth	0	0 KB	Ith	0	0 KB	III	
TELNET	™ Telnet	0	0 KB	Ith	0	0 KB	lth.	0	0 KB	111	
	MTTP Link	79	0 KB	lth	1,769	0 KB	lth	5,076	0 KB	III	
	MTTP Content	79	6,753 KB	lth	1,769	163,566 KB	lth.	5,076	466,329 KB	111	
	MTTP Upload/Download	4	2 KB	lth	56	40 KB	lth	120	1,089 KB	lih.	
HTTP	⊀ Video Stream	2	50,485 KB	III	46	549,817 KB	Ith	80	1,056,197 KB	JAMES	
THE	A			le e			le s		72.77.2	1. 1	

Click on the Daily, Weekly or Summary Statistical Report of the particular user (IP), it will pop out a window display statistical on bar chart.



Internet Content Reconstruction

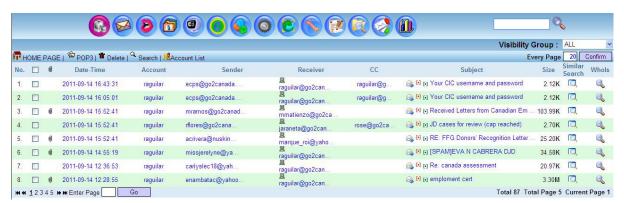
Email

ICI system captures and reconstructs Email content back to its original content view format. Various Email protocol types supported are as follow:

- 1. POP3 (Incoming)
- 2. IMAP (Incoming)
- 3. SMTP (Outgoing)
- 4. Webmail (Read)
- 5. Webmail (Sent)

POP3

Post Office Protocol 3 or POP3 (Incoming) Email obtainable information includes Date-Time, Account (with IP/MAC), Sender, Receiver, CC, Subject with Email content (with attachment if any) and Size.

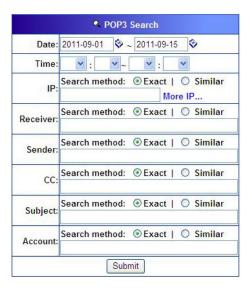


Features in this POP3 GUI:

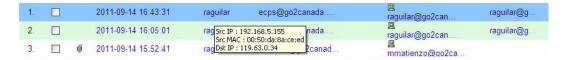
- POP3: Refresh the page content.
- Delete: Delete the Email (that has been checked or ticked).
- Account List: This section shows all the Email Account List.



 Search: Search for Email based on the specified parameters such as Date, Time, IP, Receiver, Sender, CC, Subject and Account.



Source, Destination IP Address and MAC Address by pointing the mouse to the account column.



- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting
- B Shows the IP address
- Forward Email: Forward the Email to a specific Email account
- [•] Source Code: Shows the Email source and path.
- [•] Convertor: Convert the subject name to another language to be readable. This convertor coverts the character in different coding formats such as zh-ch (Chinese), zh-sg (Singapore), zh-tw (Taiwan), en (English), utf-8, JP (Japanese).

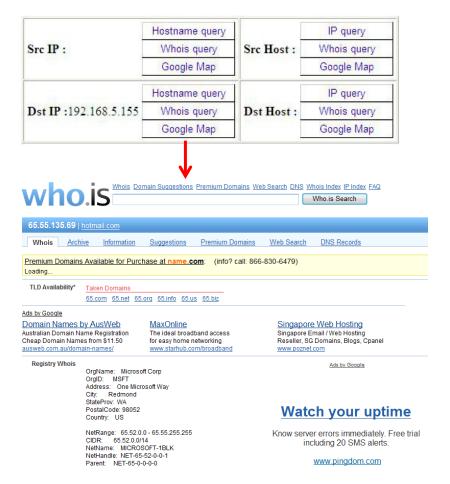


Subject: Click on Email subject to view the content of the Email.

Similar Search: Search for Email with similar content

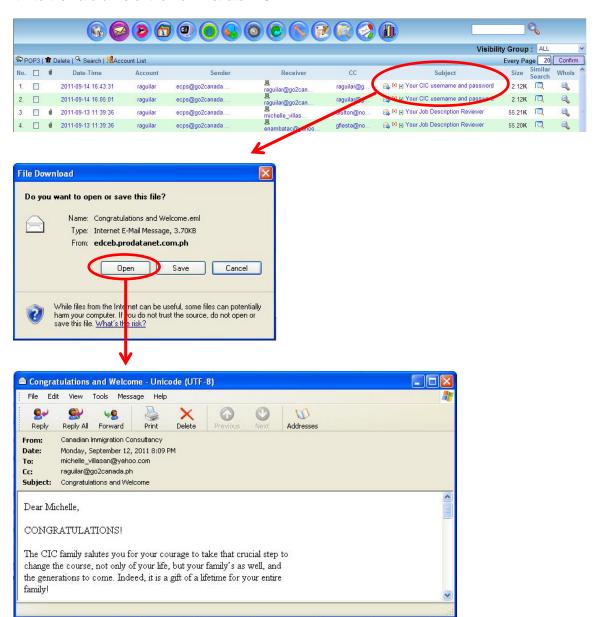


 Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet.



View Email Content

Click on the Email subject and Administrator can choose to open and view the Email content or save it into the hard drive of the Administrator PC.



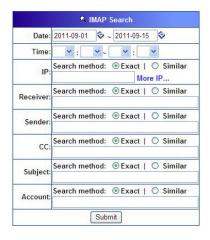
IMAP

Internet Message Protocol (IMAP) obtainable information includes Date-Time, Account (with IP/MAC), Sender, Receiver, CC, Subject with Email content (with attachment if any) and Size.



Features in this IMAP GUI:

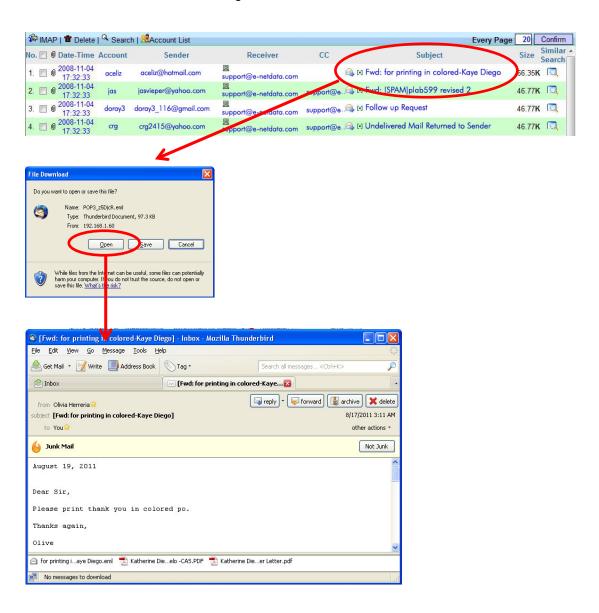
- IMAP: Refresh the page content.
- Delete: Delete the Email (that has been checked or ticked).
- Account List: This section shows all the Email Account List. (Refer to 2.1.1)
- Search: Search for Email based on the specified parameters such as Date, Time, IP, Receiver, Sender, CC, Subject and Account.



- Source, Destination IP Address and MAC Address by pointing the mouse to the account column
- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting
- ullet Attachment: This symbol shows there is attachment in the Email
- B Shows the IP address
- Forward Email: Forward the Email to a specific Email account
- [•] Source Code: Shows the Email source and path.
- [•] Convertor: Convert the subject name to another language to be readable. This convertor coverts the character in different coding formats such as zh-ch (Chinese), zh-sg (Singapore), zh-tw (Taiwan), en (English), utf-8, JP (Japanese).
- Subject: Click on Email subject to view the content of the Email.
- Similar Search: Search for Email with similar content
- Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet.

View Email Content

Click on the Email subject and Administrator can choose to open and view the Email content or save it into the hard drive of the accessing PC.



SMTP (Outgoing)

Simple Mail Transfer Protocol or SMTP (Outgoing) obtainable information includes Date-Time, Account (with IP/MAC), Sender, Receiver, CC, BCC, Subject with Email content (with attachment if any) and Size.



Features in this SMTP GUI:

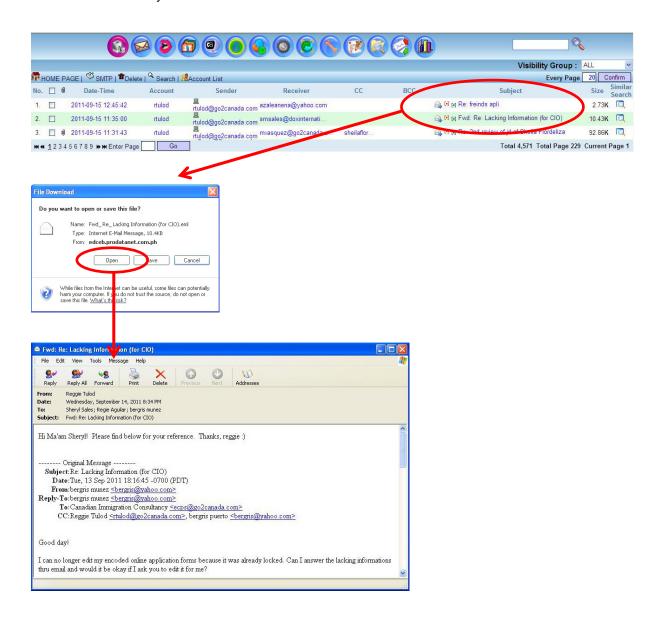
- SMTP: Refresh the page content.
- Delete: Delete the Email (that has been checked or ticked).
- Account List: This section shows all the Email Account List. (Refer to 2.1.1)
- Search: Search for Email based on the specified parameters such as Date, Time, IP, Receiver, Sender, CC, Subject and Account.



- Source, Destination IP Address and MAC Address by pointing the mouse to the account column
- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting
- B Shows the IP address
- Forward Email: Forward the Email to a specific Email account
- [•] Source Code: Shows the Email source and path.
- [•] Convertor: Convert the subject name to another language to be readable. This convertor coverts the character in different coding formats such as zh-ch (Chinese), zh-sg (Singapore), zh-tw (Taiwan), en (English), utf-8, JP (Japanese).
- Subject: Click on Email subject to view the content of the Email.
- Similar Search: Search for Email with similar content
- Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet.

View Email Content

Click on the Email [Subject] link and you can choose to open and view the Email content or save it into the hard drive of your PC.



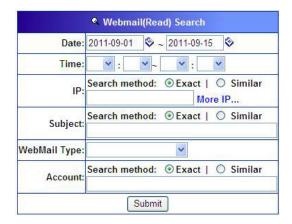
Webmail Read

Webmail supported includes Yahoo Mail, Windows Live Hotmail, Gmail etc. Webmail (Read) obtainable information includes Date-Time, Account (with IP/MAC), Sender, Subject (with content) and Webmail Type.



Features in this Webmail (Read) GUI:

- Webmail (Read): Refresh the page content.
- Delete: Delete the Email (that has been checked or ticked).
- Account List: This section shows all the Email Account List. (Refer to 2.1.1)
- Search: Search for Webmail based on the specified parameters such as Date, Time, IP, Receiver, Sender, CC, Subject and Account.

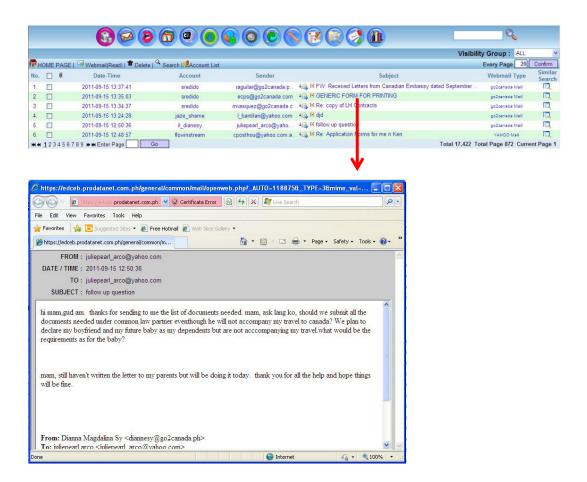


- Source, Destination IP Address and MAC Address by pointing the mouse to the account column
- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting

- Forward Email: Forward the Email to a specific Email account
- [•] Source Code: Shows the Email source and path.
- [•] Convertor: Convert the subject name to another language to be readable. This convertor coverts the character in different coding formats such as zh-ch (Chinese), zh-sg (Singapore), zh-tw (Taiwan), en (English), utf-8, JP (Japanese).
- Subject: Click on Email subject to view the content of the Email.
- Similar Search: Search for Email with similar content
- Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet.

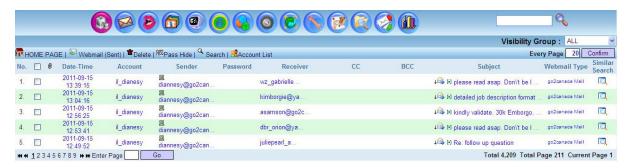
View Email Content

Click on the [Subject] link and the following GUI which is the Webmail read content will be displayed.



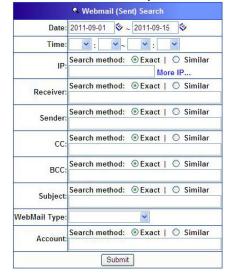
Webmail Sent

Webmail (Sent) obtainable information includes Date-Time, Account (with IP/MAC), Sender, Password (if available), Receiver, CC, BCC, Subject with Webmail content (with attachment if any) and Webmail Type.



Features in this Webmail (Sent) GUI:

- Webmail (Sent): Refresh the page content
- Delete: Delete the Email (that has been checked or ticked)
- Pass Show: Shows the login password if available.
- Account List: This section shows all the Email Account List
- Search: Search for Webmail based on the specified parameters such as Date, Time, IP, Receiver, Sender, CC, BCC, Subject, Webmail Type and Account



- Source, Destination IP Address and MAC Address by pointing the mouse to the account column
- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting
- B Shows the IP address
- A Forward Email: Forward the Email to a specific Email account
- [•] Source Code: Shows the Email source and path.
- [•] Convertor: Convert the subject name to another language to be readable. This convertor coverts the character in different coding formats such as zh-ch (Chinese), zh-sg (Singapore), zh-tw (Taiwan), en (English), utf-8, JP (Japanese).
- Subject: Click on Email subject to view the content of the Email.
- Similar Search: Search for Email with similar content
- Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet.

View Email Content

Click on the [Subject] link and the following GUI which is the Webmail sent content will be displayed.





Instant Messaging & Chat

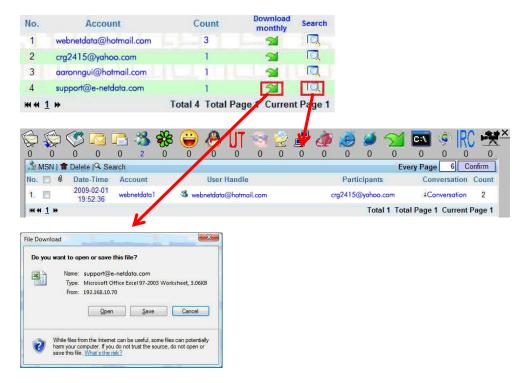
Windows Live Messenger (aka MSN)

MSN obtainable information includes Date-Time, Account (with IP/MAC), User Handle (User Account), Participant Account, Conversation with content which includes file transferred and MSN webcam (video) session.

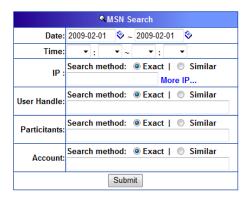


Features in this MSN GUI:

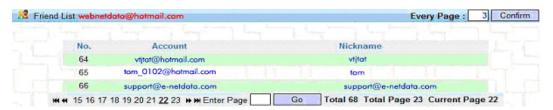
- MSN: Refresh the page content.
- Delete: Delete the MSN chat record (that has been checked or ticked).
- Account List: This section shows the MSN Account List. Administrator can download the monthly chat record (in Excel format) and search for the chat record as shown below.



• Search: Search for MSN record based on the specified parameters such as Date, Time, IP, User Handle, Participants and Account.



- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting
- If ile Transferred: This symbol shows there is file transferred over the MSN
- Friend List: This will show the entire friend list for the particular MSN account.

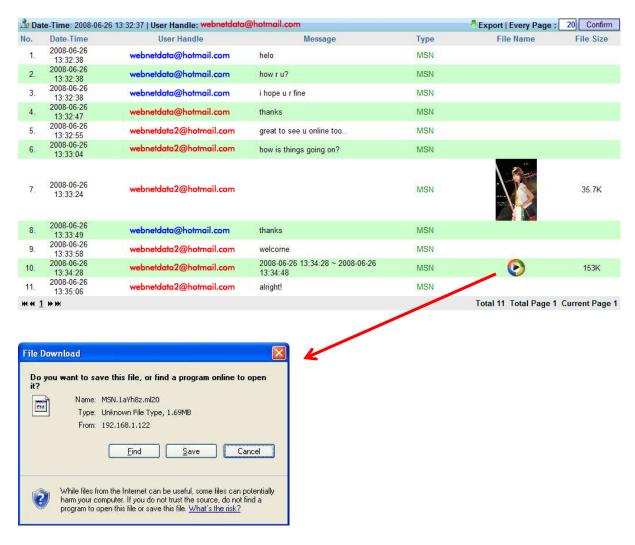


- Download: Download the MSN chat record.
- Conversation: Click on Conversation to view the chat content.
- Similar Search: Search for chat record with similar content.



MSN Conversation Content

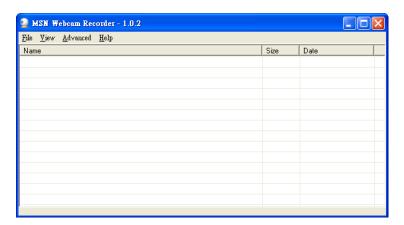
Click on the [Conversation] link and the following GUI will pop up and you can view the whole chat session content. It includes chat text message, file transferred (which can be opened and downloaded) and webcam session reconstructed in ml20 format.



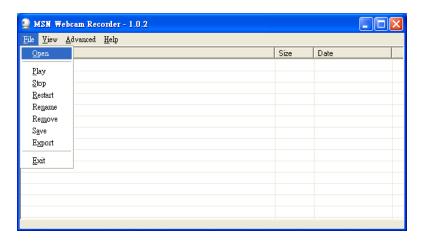
To playback the MSN webcam session, click on the video icon and download the webcam file (in ml20 format) to your PC and play back using the MSN web recorder tool.

MSN Webcam Playback

- 1. Download and install MSN web recorder 1.0.2 from the following website at http://ml20rc.msnfanatic.com/download.html
- 2. Start or execute the MSN web recorder



3. Open ml20 file: File - Open - OPEN and select the file to play







4. Click on [Play] to play back the record MSN webcam session

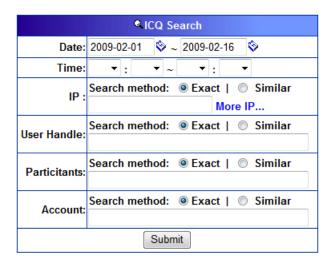
ICQ

ICQ Messenger obtainable information includes Date-Time, Account (with IP/MAC), User Handle (User Account), Participant Account, Conversation with content and Count.



Features in this GUI:

- ICQ: Refresh the page content.
- Delete: Delete the ICQ chat record (that has been checked or ticked)
- Account List: This section shows the ICQ Account List. Administrator can download the monthly chat record (in Excel format) and search for the chat record as shown below
- Search: Search for ICQ record based on the specified parameters such as Date, Time, IP, User Handle, Participants and Account



- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting
- If ile Transferred: This symbol shows there is file transferred over the ICQ
- Friend List: This will show the entire friend list for the particular ICQ account.
- Download: Download the ICQ chat record.
- Conversation: Click on Conversation to view the chat content.
- Similar Search: Search for chat record with similar content.

ICQ Conversation

Click on the [Conversation] link, the following conversation window content will pop up and you can view the entire chatting session and files transferred as shown in the diagram below.

₩ D	ate-Time: 2008	-09-22 09:38:02 Us	ser Handle : 447852636	Export Every Page :	20 Confirm
No.	Date-Time	User Handle	Message	File Name	File Size
1.	2008-09-22 09:38:02	485185665	helo		
2.	2008-09-22 09:38:10	447852636	yes		
3.	2008-09-22 09:38:18	447852636	stupib dog		
4.	2008-09-22 09:38:29	485185665	how r u?	MAIL.rar	3.8K
5.	2008-09-22 09:38:38	485185665	i hope u r fine		
6.	2008-09-22 09:38:45	447852636	thanks		
7.	2008-09-22 09:38:50	447852636	great to see u online too		
8.	2008-09-22 09:39:00	485185665	how is things going on?		
9.	2008-09-22 09:39:11	485185665	fine		
10.	2008-09-22 09:39:31	447852636	2008-06-26 13:34:28 ~ 2008-06-26 13:34:48		
11.	2008-09-22 09:39:38	447852636	welcome		
12.	2008-09-22 09:39:40	447852636	2008-06-26 13:34:28 ~ 2008-06-26 13:36:33	021165-rallye- antibes.jpg	1.3M
13.	2008-09-22 09:39:49	485185665	alright!		
## ##	<u>1</u> »			Total 13 Total Page 1	Current Page 1

Yahoo Messenger

Yahoo Messenger obtainable information includes Date-Time, Account (with IP/MAC), User Handle (User Account), Participant Account, Conversation (with content), file transferred, VOIP and Webcam session etc.



Features in this GUI:

- YAHOO: Refresh the page content
- Delete: Delete the YAHOO chat record (that has been checked or ticked)
- Account List: This section shows the YAHOO Account List. Administrator can download the monthly chat record (in Excel format) and search for the chat record as shown below
- Search: Search for YAHOO record based on the specified parameters such as Date, Time, IP, User Handle, Participants and Account



- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting
- File Transferred: This symbol shows there is file transferred over the YAHOO
- Friend List: This will show the entire friend list for the particular YAHOO account.
- Download: Download the YAHOO chat record.
- Conversation: Click on Conversation to view the chat content.
- Similar Search: Search for chat record with similar content.

Yahoo Messenger Conversation, VOIP and Webcam Sessions

Click on the click the [Conversation] link and the following conversation window will pop up and you can view the entire text chat session, file transfer, VoIP (audio) and webcam (video) sessions. For webcam play back, you just need to click on the webcam (video) icon and it will play back the webcam video. For VoIP play back, you need to follow the instructions as follow.



Yahoo Messenger VolP Play Back

To play back Yahoo VoIP session, you can click and download the VoIP (audio) file in GIPS format to your own PC. You must have GIPS Decoder installed on your PC in order to playback the GIPS VoIP (audio) file.



GIPS Decoder for Yahoo Messenger VolP Play Back

This software is used to play back recorded Yahoo VOIP audio file (.GIPS file format). GIPS Decoder is provided and supported by GIPS community.

Note: GIPS Decoder is maintained by GIPS Community. User would be required to purchase GIPS Decoder directly from GIPS Community in order to play back Yahoo VoIP audio file.

QQ Messenger *

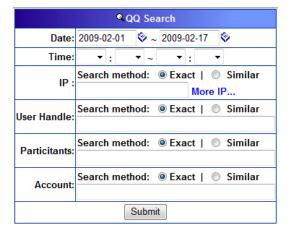
QQ chat obtainable information includes Date-time, account (with IP/MAC), user handle (user account), participant account, conversation with content and count.

* Optional Purchase License – Sniffer Agent for QQ 2010, QQ 2010 only supported by using Sniffer Agent (Sold as Optional License)



Features in this QQ GUI:

- QQ: Refresh the page content.
- Delete: Delete the QQ chat record (that has been checked or ticked).
- Account List: This section shows QQ Account List. Administrator can download the monthly chat record (in Excel format) and search for the chat record as shown below. (Refer to 2.2.1)
- Search: Search for QQ record based on the specified parameters such as Date, Time, IP, User Handle, Participants and Account.



- Every Page 5 Confirm Display the number of record per page
- Checkbox: Check or tick the checkbox for deleting
- If the Transferred: This symbol shows there is file transferred over the QQ
- Friend List: This will show the entire friend list for the particular QQ account.
- Download: Download the QQ chat record.
- Conversation: Click on Conversation to view the chat content.
- Similar Search: Search for chat record with similar content.

How to view the encrypted conversation content for QQ?

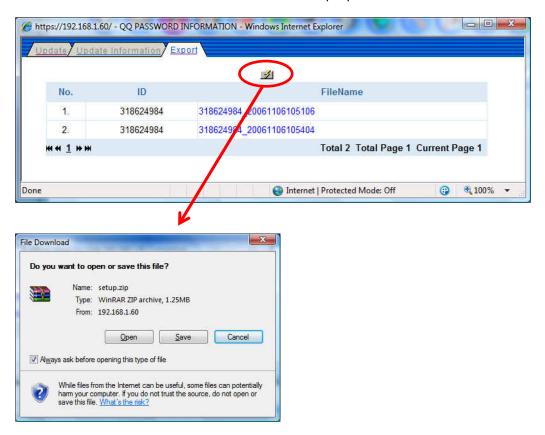
The captured conversation in QQ is encrypted. This section explains the process on how to use the QQ cracker to decrypt the information.

Step 1 - Download the QQ cracker

The following diagram shows the steps to download the QQ cracker. Click on Information and a Window will pop up as shown below.



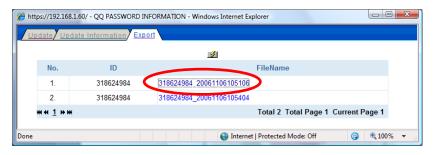
Click on the icon to download QQ Cracker Tool "setup.zip."



Step 2 – Install QQ cracker into computer

- Unzip the file and install the QQ cracker tool "setup.exe."
- Click [Next] to continue.
- Click [Next] to continue. You may want to change to different directory to install the QQ Cracker Tool.
- Click [Next] to continue and the system will create a Desktop icon on your computer. The
- QQ cracker will then be ready to be installed in your PC system.
- Click [Next] to complete the Installation.
- Click [Finish] and Launch the QQ Cracker 2 Tool.

Step 3 – Decrypt the conversation. At Information Export page, download the conversation file.





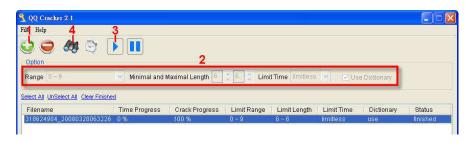
Launched QQ Cracker 2 Tool



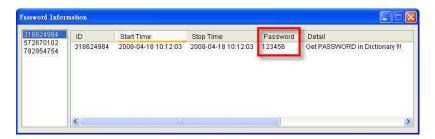
Function		Function Description	
1	Import Encrypted File	+ and – signs. + means import, - means delete.	
2	QQ ID List	QQ decrypted password information.	
3	Speed Test	Password cracking capability (number per second).	
4	START	Start the process to decrypt.	
5	PAUSE	Pause the process to decrypt.	
6	Range	Password character range.	
7	Password Length	Password length.	
8	Limit Time	Set time limitation.	
9	Use Dictionary	Whether to use dictionary attack method.	

Process of Decryption:

- 1. Import QQ conversation files to decrypt.
- 2. Select all configurations.
- 3. Start to decrypt.
- 4. Look for the decrypted information at QQ ID List.



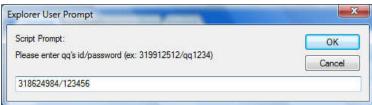
Information in QQ ID List with password cracked:



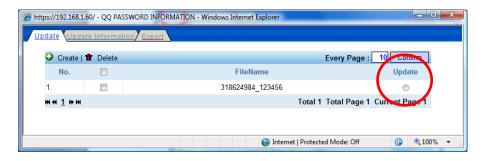
QQ Database Update

Click on Information – Update – Create. A Window will pop out and click [OK] to continue.





Then click on the radio button [Update]

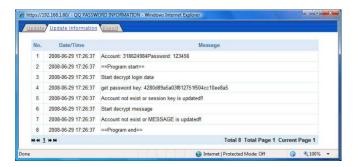




Click [OK] to continue and the following Window will pop out.



Close the Window and go to Update Information page. This page will show the information of QQ Database being update.



You may now return to the QQ page and click on the [Conversation]. It will display the content of the conversation.



UT Chat Room

UT Chat Room is popular chat room in Taiwan. UT Chat Room retrievable information includes Date-Time, Account, User Handle, Conversation (with content) and count.



Features in this UT Chat Room GUI:

- UT Chat room: Refresh the page content.
- Delete: Delete the UT Chat Room chat record (that has been checked or ticked).
- Account List: This section shows UT Chat Room Account List. Administrator can download the monthly chat record (in Excel format) and search for the chat record as shown below
- Search: Search for UT Chat Room record based on the specified parameters such as Date, Time, IP, User Handle, Participants and Account
- Every Page 5 Confirm Display the number of record per page.
- Checkbox: Check or tick the checkbox for deleting.
- J Download: Download the UT Chat Room chat record.
- Conversation: Click on Conversation to view the chat content.
- Similar Search: Search for chat record with similar content.

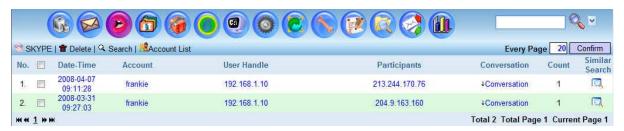
Sample Conversation:



Skype *

Skype (Voice Call Log) obtainable information includes Date-Time, account (with IP/MAC), User Handle (user IP), Participants (peer IP), Conversation (with Voice Call Duration Information) and count. User can also purchase optional Skype Text Chat Message and Voice Recording Module (Skype Sniffer Agent for Skype version 4.2 and below). This add on module can record Skype Text Chat Message by manually installing an Agent software on targeted user PC.

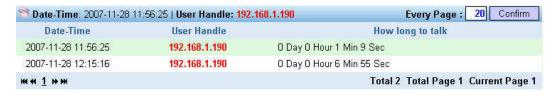
^{*} Skype Sniffer Agent for Content Capturing License sold separately



Features in this Skype GUI:

- Skype: Refresh the page content.
- Delete: Delete the Skype chat record (that has been checked or ticked).
- Account List: This section shows Skype Account List. Administrator can download the monthly chat record (in Excel format) and search for the chat record as shown below
- Search: Search for QQ record based on the specified parameters such as Date, Time, IP, User Handle, Participants and Account
- Every Page 5 Confirm Display the number of record per page.
- Checkbox: Check or tick the checkbox for deleting.
- Download: Download the Skype chat record
- Conversation: Click on Conversation to view the Skype Voice Call details
- Similar Search: Search for chat record with similar content.

Conversation Sample:



Gtalk (in HTTP Gmail)

Gtalk obtainable information includes Date-Time, Account (with IP/MAC), User Handle (user account), Participant Account, Conversation with content (text and voice call) and count.



Features in this Gtalk GUI:

- GOOGLETALK: Refresh the page content.
- Delete: Delete the Gtalk chat record (that has been checked or ticked).
- Account List: This section shows the Gtalk Account List. Admin can download the monthly chat record (in Excel format) and search for the chat record as shown below
- Search: Search for Gtalk record based on the specified parameters such as Date, Time, IP, User Handle, Participants and Account
- Every Page 5 Confirm Display the number of record per page.
- Checkbox: Check or tick the checkbox for deleting.
- ullet File Transferred: This symbol shows there is file transferred over the Gtalk.
- Friend List: This will show all the friend list for the particular Gtalk account
- Download: Download the Gtalk chat record.
- Conversation: Click on Conversation to view the chat content.
- Similar Search: Search for chat record with similar content

Conversation Sample:



Internet Relay Chat – IRC

IRC obtainable information includes date-time, account (with IP/MAC), user handle (user account), conversation with content and count.



Features in this IRC GUI:

- IRC: Refresh the page content.
- Delete: Delete the IRC chat record (that has been checked or ticked)
- Account List: This section shows the IRC Account List. Administrator can download the monthly chat record (in Excel format) and search for the chat record as shown below
- Search: Search for IRC record based on the specified parameters such as Date, Time, IP, User Handle, Participants and Account
- Every Page 5 Confirm Display the number of record per page.
- Checkbox: Check or tick the checkbox for deleting.
- Download: Download the IRC chat record.
- Conversation: Click on Conversation to view the chat content.
- Similar Search: Search for chat record with similar content

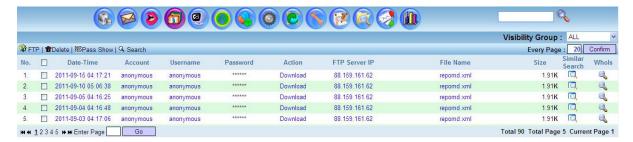
Sample Conversation:

C Date-	Time: 2011-08-09 17:08:15 User Handle:	channix	PExport Every Page : 20 Confirm
No.	Date-Time	User Handle	Message
1.	2011-08-09 17:08:15	channix	hello
2.	2011-08-09 17:09:07	bignono1	ello
3.	2011-08-09 17:09:31	bignono1	eelo
4.	2011-08-09 17:10:59	BigMike"	jello
5.	2011-08-09 17:11:13	channix	anyone knows how to add puppy linux into windows domain?

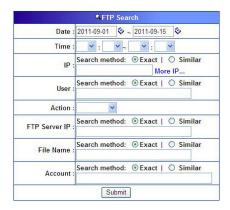
File Transfer

File Transfer Protocol - FTP

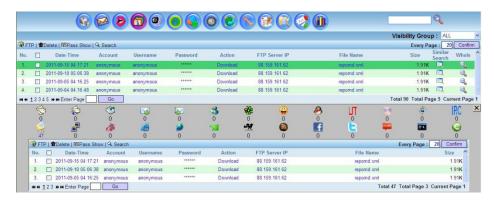
FTP obtainable information includes Date-Time, Account (with IP/MAC), Username, Password, Action (Upload/Download), FTP Server IP, File Name with File Transferred and Whois.



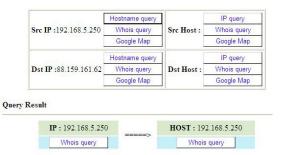
- Features in this FTP GUI:
- FTP: Refresh the page record List.
- Delete: Delete the Email (that has been checked or ticked).
- Pass Show: Display FTP account password.
- Search: Search for FTP record based on the specified parameters such as Date, Time, IP, User, Action, FTP Server IP, File Name and Account.



- Every Page 5 Confirm Display the number of record per page.
- Checkbox: Check or tick the checkbox for deleting.
- Similar Search: Search for FTP record with similar content.



 Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet.





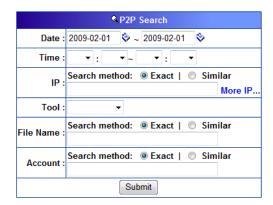
Peer to Peer File Sharing - P2P

P2P File Sharing obtainable information includes Date-Time, Account (with IP/MAC), P2P Tool Used, File Name, Last Activated Date-Time, Send Throughput, Received Throughput, Detail (Each Connection Session, Peer IP, Port Used, Peer Port etc.). P2P protocols supported are Bittorent, eMule/eDonkey, Gnutella and Fast track.



Features in this P2P GUI:

- P2P: Refresh the page content List.
- Delete: Delete the record that is checked (by clicking the Checkbox and Delete button).
- Search: Search the P2P record based on the specified parameters such as Date, Time, IP, Tool, File Name and Account.



- Every Page 5 Confirm Display the number of record per page.
- Checkbox: Records can be deleted by checking the Checkbox and Delete button.
- Similar Search: Search for P2P record with similar content.

HTTP

When the targeted user surfs the Internet (World Wide Web), ICI system will capture and reconstruct the Web page contents which include HTTP URL Link, HTTP Content and HTTP Reconstruct. ICI system will also reconstruct files upload/download (HTTP Upload/Download) as well as video steam (HTTP Video Stream) such as YouTube, Google Video, Metacafe etc.

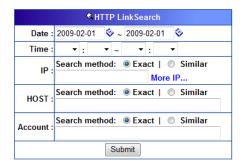
HTTP Link

HTTP Link provides information of Web Sites accessed which includes Date-Time, Account (with IP/MAC) and Host (URL/Web Sites Tag). The Web Sites can be accessible by clicking on the URL/Web Sites Tag with connection to the Internet.



Features in this HTTP GUI:

- HTTP Link: Refresh this page content List.
- Delete: Delete the record that is checked.
- Search: Search the HTTP record based on the specified parameters such as Date, Time, IP, Host and Account.



- Every Page 5 Confirm Display the number of record per page.
- Checkbox: Records can be deleted by checking the checkbox.
- Similar Search: Search for HTTP Link with similar content.

 Whois: Provide information of Source and Destination IP and Hostname. Allows you to search for the IP Address information through the Internet.





HTTP Content

HTTP Content obtainable information includes Date-Time, Account (with IP/MAC), URL/Web Sites Tag with Web Pages Content (consists of html text, java script, flash etc. of the web sites browsed).



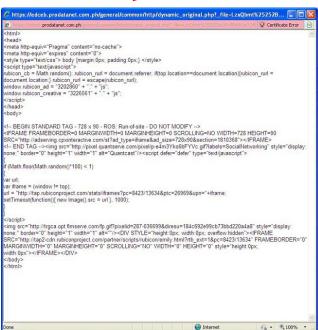
Features in this HTTP Content GUI:

- HTTP Content: Click on to refresh the content List.
- Delete: Delete record which is checked.
- Search: Search HTTP Content record based on the specified parameters such as Date, Time, IP, Content and Account
- Every Page 5 Confirm Display the number of record per page.
- Checkbox: Records can be deleted by checking the Checkbox.
- [•] Source Code: Click on the red icon to view the source codes.
- Stink: Open the URL link and access the Website.
- Similar Search: Search for HTTP Link with similar content
- Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet

Source Code: [•]

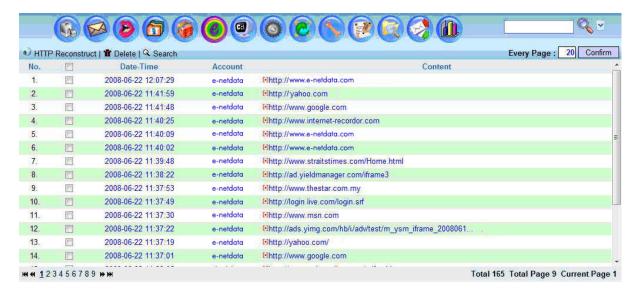
When click on, the following UI will pop up to display the source code of webpage.





HTTP Reconstruct

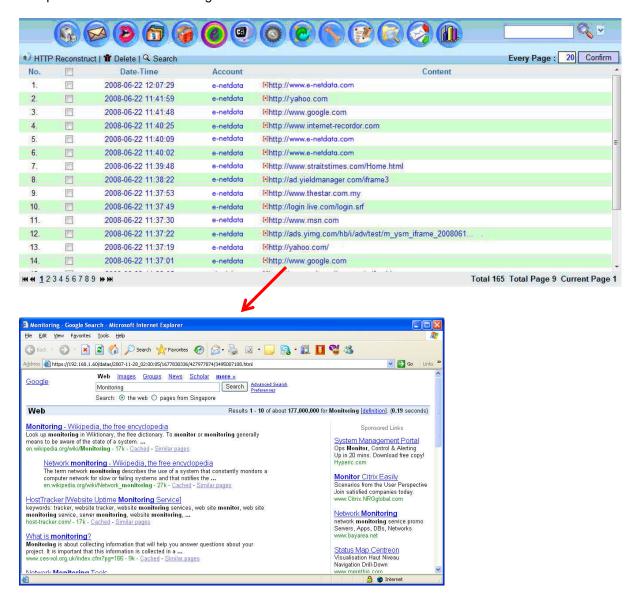
HTTP Reconstruct function will rebuild/reconstruct the entire web page that has been browsed by users. The obtainable information includes Date-Time, Account (with IP/MAC) and HTTP Web Page reconstructed content.



Features in this HTTP Reconstruct GUI:

- HTTP Reconstruct: Click on to refresh the page content List
- Delete: Delete record which is checked
- Search: Search the particular records based on the specified parameters such as Date, Time, IP, URL and ID
- Display Mode: Display either IP or computer (PC) name on this UI
- Every Page 5 Confirm Display records per page. Input the number and click on the confirm button to set up
- Checkbox: Records can be deleted by checking the Checkbox.
- [•] Source Code: Click on the red icon to view the source codes.

Sample Reconstructed Web Page



Note:

To view the reconstructed content, firstly, you are required to turn on Web Page Reconstruction Capturing Module.



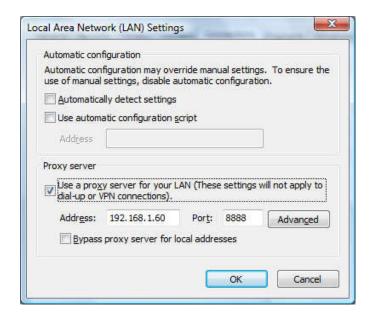
Then, you are required to start HTTP Reconstruct Proxy Server as the HTTP Reconstruct in ED2-1.15.0 has been upgraded to use Proxy Service.



You are also required to set your web browser configuration to access from by following proxy setting:

Proxy Address: IP Address of the ICI system, ex: 192.168.1.60

Port: 8888



With the above setting, you will be able to click on the link on the HTTP Reconstruct and view the reconstructed web page content.

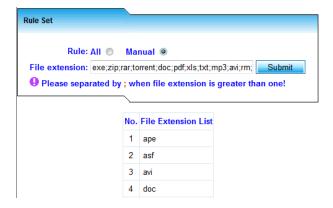
HTTP Upload/Download

HTTP Upload/Download obtainable information includes Date-Time, Account (with IP/MAC), Action (Upload/Download), File Name (with actual file content) and Upload/Download URL Link, Whois etc.



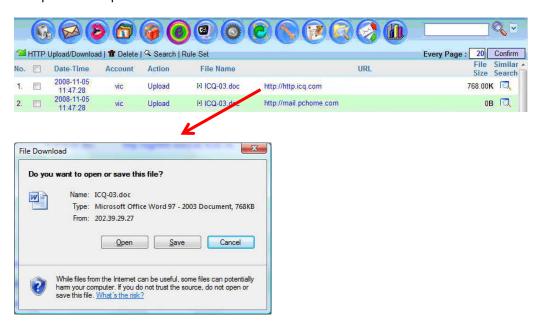
Features in this HTTP Upload/Download GUI

- HTTP Download/Upload: Click on to refresh the page content List
- Delete: Delete record which is checked and ticked
- Search: Search the particular records based on the specified parameters such as Date, Time, IP,
 File Name and Account
- Rule Set: Define the file extension which the system reconstructs. There are two settings: Reconstruct All or Set Manually. Administrator can opt to enter the specific file extension by select Manual option.



- Every Page 5 Confirm Display records per page. Input the number and click on the confirm button to set up
- Checkbox: Records can be deleted by checking the Checkbox
- Similar Search: Search for HTTP Link with similar file name or link
- Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet

Sample HTTP Upload/Download



HTTP Video Streaming (FLV Video)

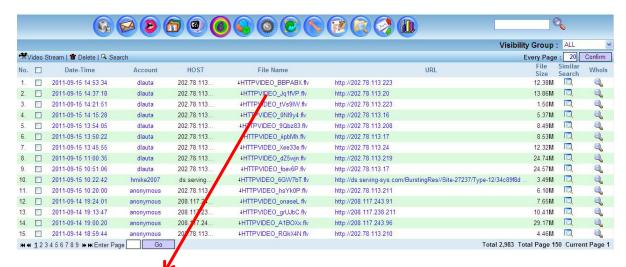
HTTP Video Streaming (FLV Video Format) obtainable information includes Date-Time, Account, Host, File Name, URL link of the video stream and file size. Video Stream supported includes YouTube, Metacafe etc.



Features in this HTTP Video Streaming GUI:

- Video Stream: Click on to refresh the page content List.
- Delete: Delete record which is checked.
- Search: Search the particular records based on the specified parameters such as Date, Time, IP,
 File Name and Account
- Every Page 5 Confirm Display records per page. Input the number and click on the confirm button to set up
- Checkbox: Records can be deleted by checking the Checkbox
- Similar Search: Search for HTTP Video with similar file name or link
- Whois: Provide information of Source and Destination IP and Hostname. It allows you to search for the IP Address information through the Internet

Sample HTTP Video Stream





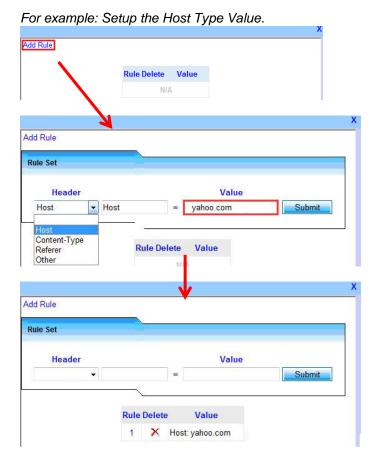
HTTP Request

HTTP Request captures pre-defined web pages record such as Host, Content Type, Referrer and other defined Rules or Definitions. The obtainable information includes Date-Time, Account, Action and HTTP Link (URL).



Features in this HTTP Request GUI:

- HTTP Request: Click on to refresh the page content List
- Delete: Delete record which is checked
- Search: Search the particular records based on the specified parameters such as Date, Time, IP and Account
- Every Page: 5 Confirm Display records per page. Input the number and click on the confirm button to set up
- Checkbox: Records can be deleted by checking the Checkbox
- Similar Search: Search for HTTP Video Stream with similar file name or link
- Whois: Provide information of Source and Destination IP and Hostname
- Rule Set: Setup and Define HTTP Request Capture Rules and Configuration



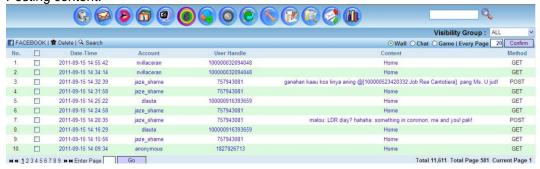
Sample HTTP Request Content:



HTTP Social Network Sites

Facebook (Wall, Chat and Games)

Facebook obtainable information includes Facebook Wall, Chat and Games Records. The obtainable information includes the POST and GET content of Facebook Wall. The GET contents would consist of the user's Facebook Homepage content. The POST contents would consist of the users' Facebook Posting content.



Facebook (Chat) will show the reconstructed results of chat content between the user and the friend List in his/her Facebook account. Facebook (Games) will show game played and the reconstructed Games pages accessed by the users.

HTTP Social Network Sites - Twitter

Twitter obtainable information includes date-time, account, user handle and content. The content consists of POST and GET data.



HTTP Social Network Sites - Plurk

Plurk obtainable information includes date-time, account, user handle and content. The content consists of POST and GET data.



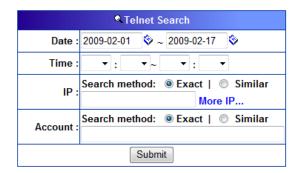
Telnet

Telnet is an Internet protocol use on Internet and LAN. Telnet clients have been available on most Unix systems and are available for all platforms. Most network equipment (router, switches etc.) and OSs with a TCP/IP stack support some kind of Telnet service server for their remote configuration. Telnet obtainable information in ICI system includes date-time, account (with IP/MAC), username, password, server IP and session play back.



Features in this Telnet GUI:

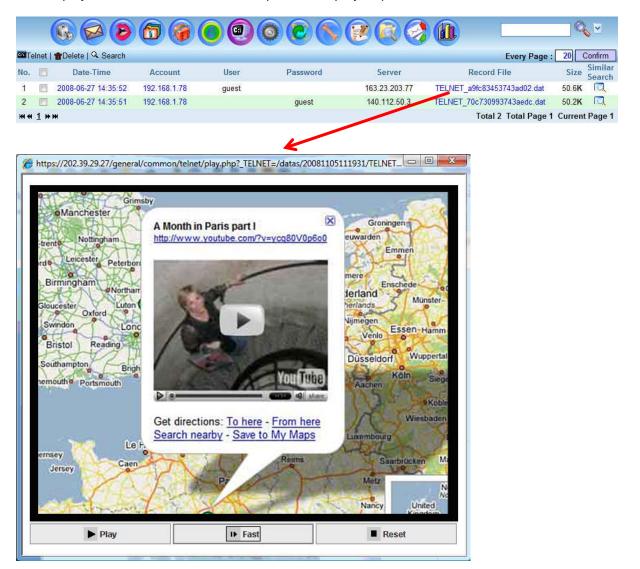
- Telnet: Click on to refresh the page content List.
- Delete: Delete record which is checked
- Search: Search the particular records based on the specified parameters such as Date, Time, IP,
 File Name and Account



- Every Page: 5 Confirm Display records per page. Input the number and click on the confirm button to set up
- Checkbox: Records can be deleted by checking the Checkbox
- Similar Search: Search for Telnet session with similar Telnet server etc.
- Whois: Provide information of Source and Destination IP and Hostname

View the Telnet Session

The following GUI will be popped up when Administrator click the link [Record File]. This GUI acts as a video player. Administrator can view the process step by step.



Others

Online Games

Online Game log obtainable information includes Date-Time, Account (with IP/MAC), Port, Game Server IP, Server Port and Game Name.



Features in this Online Game GUI:

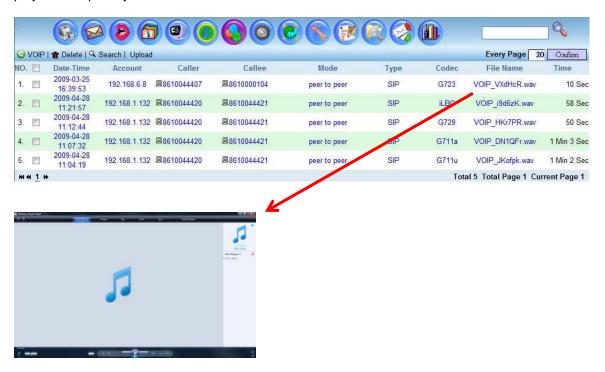
- Online Game: Refresh the page content List.
- Delete: Delete the record that is checked (by clicking the Checkbox and Delete button).
- Search: Search the Online Game record based on the specified parameters such as
- Date, Time, IP, Port, Game Server IP, Game Server Port, Game Name and ID.



- Every Page: 5 Confirm Display records per page. Input the number and click on the confirm button to set up
- Checkbox: Records can be deleted by checking the Checkbox
- Similar Search: Search for Online Game record with similar content

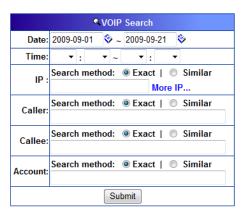
VoIP (Optional Purchase License)

VoIP Capture and Reconstruction Module is able to capture, decode and reconstruct VoIP sessions (RTP sessions). It allows the play back of voice calls on network. The supported protocols include SIP (technology that is most commonly used) and H.323. The supported CODECs include G.729, G.711-a law and G.711-u law, G.723, G.726 and ILBC. Obtainable information includes Date-Time, Account, Caller Number, Called Number, Mode of VoIP, VoIP Protocol Type, Codec and VoIP Audio File with play back capability. **Note** that this is additional license module.



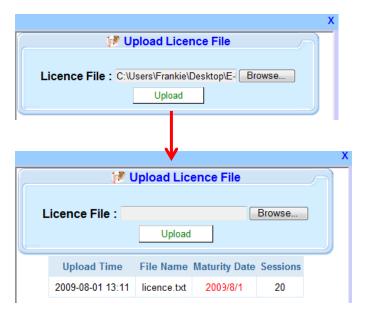
Features in this VoIP GUI:

- VoIP: Refresh the page content List.
- Delete: Delete the record that is checked (by clicking the Checkbox and Delete button).
- Search: Search the VoIP record based on the specified parameters such as Date, Time, IP, Caller, Called Number and Account.



- Every Page: 5 Confirm Display records per page. Input the number and click on the confirm button to set up
- Checkbox: Records can be deleted by checking the Checkbox

 Upload VoIP License: Please ensure that you have activated the VoIP license (which is optional purchase). Upload the VoIP license at Registration GUI. Browse for the VoIP License, licence.txt and upload for activation. Ensure that you have also started the VoIP Reconstruction Module at System Setting – Service – System Services GUI.



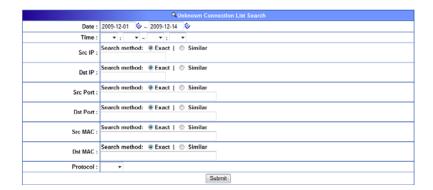
Unknown Connection

This section will List out the Unknown connections information like source IP, destination IP, source port, destination port, source MAC, destination MAC, connection size, packets and protocol (TCP/UDP). This information can be useful for network Administrator to detection unusual connections.



Features in this Unknown Connection GUI:

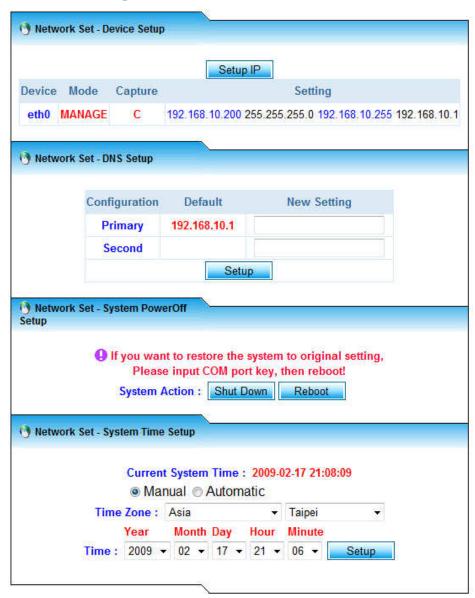
- Unknown Connection Lists: Refresh the page content List.
- Delete: Delete record checked (by clicking the Checkbox and Delete button).
- Search: Search the Unknown Connection record based on the specified parameters such as Date, Time, Source IP, Destination IP, Source Port, Destination Port, Source MAC, Destination MAC and Protocol.



- Every Page: 5 Confirm Display records per page. Input the number and click on the confirm button to set up
- Checkbox: Records can be deleted by checking the Checkbox

System Setting

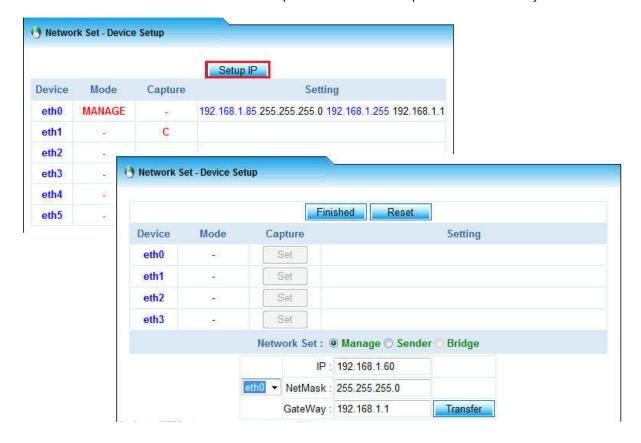
Network Setting



- **Device Setup**: Setup the system operation mode. The next section will give more detail regarding the operation modes and how to setup the operation mode properly.
- DNS Setup: Setup the Domain Name Server (DNS) IP. The IP can be obtained from your ISP providers.
- System Power off Setup: Reboot or shut down the system.
- System Time Setup: Defining the system date-time.

Network Setup

This section allows the Administrator to setup different modes of operation for the ICI system.



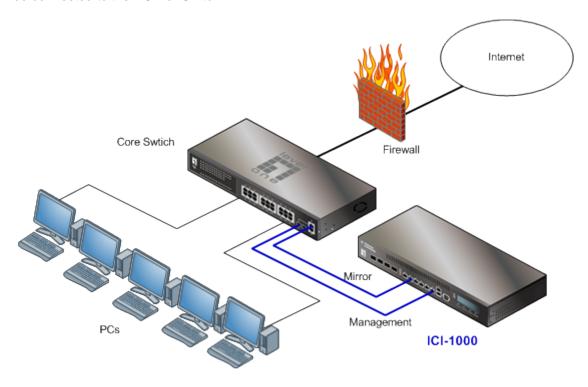
There are basically two parts need to be configured for the network setting. One is the configuration of management port and the other is configuration of the capture port. These two configurations can operate together in one NIC card or separately operate in different NIC cards.

There are two operation modes can be configured for the ICI System, however, Mirror Mode is highly recommended for best performance result.

- A. Mirror Mode
- B. Bridge Mode (Inline Mode)

A. Mirror Mode

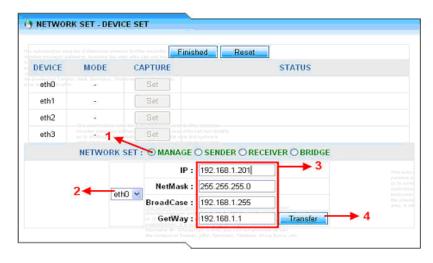
In terms of Mirror Mode, it uses two NIC cards to operate. One is for data capturing, and the other is for system management. The following diagram shows the concept of how this mode is operated. The NIC card (labelled Number 1) with port "eth0" is connected to the top HUB/Switch to capture the data. The NIC card (labelled Number 2) with port "eth1" for management (system web/telnet access) can be connected to the HUB or Switch.



This section illustrates the way of how to set up the Mirror Mode with the following diagrams step by step:

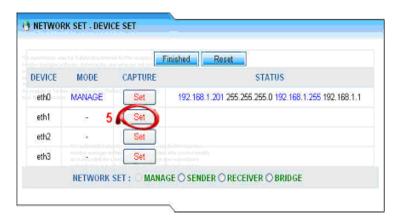
Step 1: Management Port Setup

- 1. Select and tick the option "MANAGE"
- 2. Select the NIC card called "eth0".
- 3. Setup the information of IP, Mask IP, Broadcast IP and Gateway IP. Please check with your network Administrators if you are not sure the IP setting.
- 4. Click on the button [Transfer] to submit.



Set 2: Capture Port Setup

5. Click on the button [Set] on Device eth1 or eth2 or eth3. Only one Ethernet port can be set to capture the data.



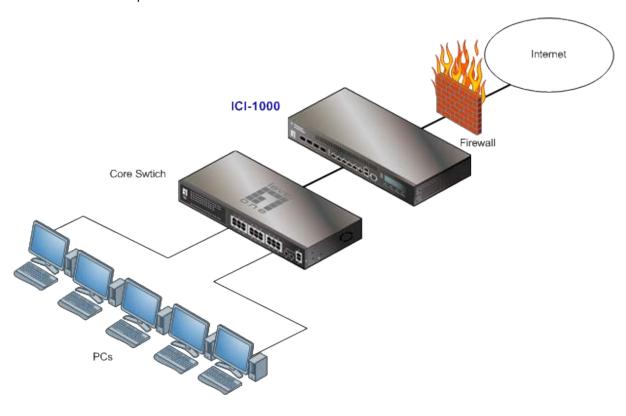
Set 3: Finish Setup

6. Click on the button [Finished], the system will reboot and the network setup is completed.



B. Bridge Mode (Inline Mode)

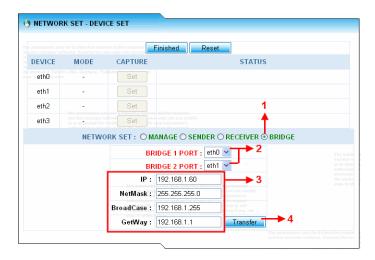
This mode uses two NIC cards to operate in the ICI system. The following diagram shows the concept of how this mode is operated.



This section illustrates the way to set up the Bridge Mode with the following diagrams step by step:

Step 1: Bridge Setup

- 1. Select and tick the option "BRIDGE"
- 2. Select Bridge port 1 and 2 (two NIC cards) as shown on the following diagram.
- 3. Setup the information of IP, Mask IP, Broadcast IP and Gateway IP. Please check with your network Administrators if you are not sure about IPs.
- 4. Click on the button [Transfer] to submit.



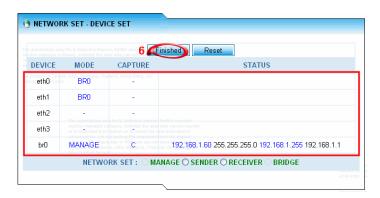
Set 2: Capture Setup

5. This step produces one visual device called "br0" to manage the data. It is suggested that Administrator to choose this visual device "br0" to capture the data as well.



Set 3: Finish Setup

6. Click on the button [Finished], the system will reboot and setup the Bridge mode.



DNS Setup

Input the primary and secondary DNS provided from your ISP provider; click on the button [Reset] to set up.



Shutdown and Reboot

Administrator can shut down or reboot the system through this GUI.



System Time Setup

Administrator can select Manual or Automatic setup for system time.



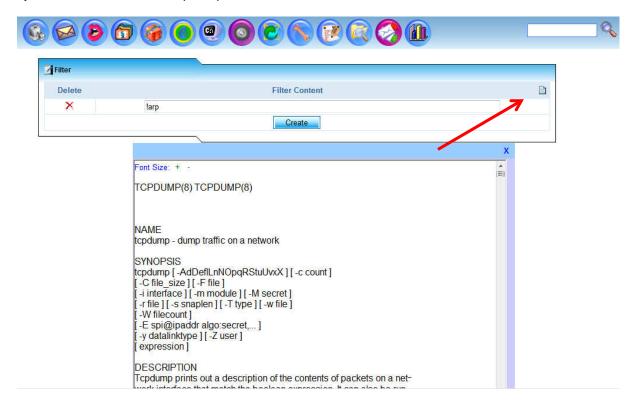
Manual setup allows Administrator to setup the time zone and system time.



Automatic setup allows Administrator to add additional time server for time synchronization. It also allows Administrator to setup the time zone. Besides, it allows Administrator to setup the synchronization time (week, day or hour).

Filter Setup

It allows the Administrator to define the List of IPs or Protocols to be captured and stored into the ICI system database base on tcpdump format.



Some Samples Setup:

Sample 1:

Record all information captured from IP 192.168.1.10

Key in: host 192.168.1.10

Sample 2:

Records all information captured from IP 192.168.1.10 and 192.168.1.20 or 192.168.1.30. Key in: host 192.168.1.10 and (192.168.1.20 or 192.168.1.30)

Sample 3:

Records all Telnet sessions of 192.168.1.10

Key in: tcp port 23 host 192.168.1.10

Storage

It shows the hard disk utilization information which includes hard disk capacity, utilization, and available space (size in Gbytes and %) left. Warning message can be configured to be issued to Administrator when utilization reaches the threshold. The system memory status and system server status is also provided here.



Services

It consists of 4 sub sections: System Services, Logger Services, Set Logger File Size and Sniffer Agent Management.

System Services

This section allows the Administrator to setup the system services such as FTP server, packet source module, syslog server, auto Email retrieval service etc.

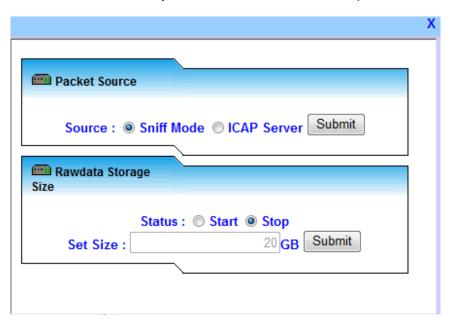


Service	Function Description	
SSH Daemon	Allow SSH Secure Shell Client or File Transfer access.	
FTP Server	Start the FTP server service for downloading of reserved raw data files, backup ISO file or syslog message.	
Mail Server	System Mail delivery service.	
Packet Source Module	Allow Administrator to switch between Sniffer Mode and ICAP Server Mode (proxy server mode). Allow system to capture raw data packets through the mirror mode. Allow Administrator to setup in order to reserve (keep) raw data files collected. Setup can be configured to allow the raw data reserving function.	
Full Text Service Engine	Allow full text search function, search by key word.	
Packet Parsing Module	Packets parsing function	
System Time Synchronizer (NTP)	Allow system time synchronization with the NTP server.	
Throughput Alert Service	Allow throughput alert function.	
Account Detection	Auto capture AD account name.	
Syslog Server	Syslog server – syslog message collection	
Sniffer Agent Management	Skype Agent Port Management	
HTTP Reconstruct Proxy Server	Start this service for using Proxy service for HTTP Web Page Reconstruction	
SNMP Read Community	SNMP service.	
Firewall Setting	Firewall service to allow only specified IP to access the system.	
Email Retrieval Service	Retrieving Emails from a specific Email Account through POP3 or IMAP service.	

Packet Source Module

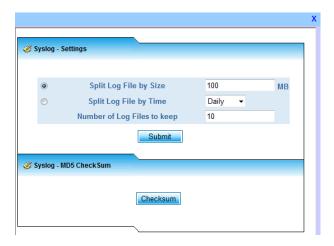
This section allows Administrator to setup the packet source which could be Sniffer Mode (system default) or ICAP Server Mode (Internet Content Adaption Protocol). Sniffer mode means the system will utilize the mirror/sniffer mode to capture traffic from the network (port-mirror capable switch or hub). ICAP mode allows the data to be provided by the ICAP proxy server from the network users which are connecting to the Internet through the ICAP proxy server. It requires the ICAP proxy server to be properly configured to send the data to the ICI system for reconstruction.

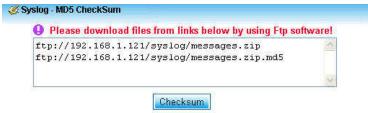
Besides, this section also allows Administrator to setup raw data reserving function. It allows Administrator to keep or store the captured raw data in the size of 100MB per raw data files basis. It also allows the Administrator to define storage size of raw data files. The raw data file reserved is stored in first in first out basis. New raw data file will replace the old raw data file. These raw data files reserved can be downloaded by using FTP client (with Console username/password set). The raw data files are automatically hashed with MD5 checksum to protect the raw data files integrity.



Syslog Server Service

This function allows the system to be a syslog message collector. Syslog messages collected from router, switches, servers and network equipment can be stored inside the ICI system. Administrator can export or download these syslog messages by using FTP client (with Console username/password set). Administrator needs to manually calculate the MD5 hashed value from this GUI before exporting or downloading the syslog message to protect the syslog message integrity.





SNMP Read Community

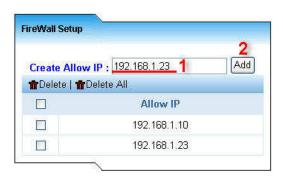
This section allows the Administrator to set the SNMP Read Community.



Firewall Setting

This service allows Administrator to specify the IP address or subnet that has the permission to access the ICI system.

1. Allow Access by Specific IP Address



2. Allow Access by Subnet



Sniffer Agent Management

If Administrator needs to change the default sniffer agent port, please click the setup button and input the port to submit.



Email Retrieval Service

This section allows the system to retrieve Email from a specific account from an Email Server. This function will solve the issue on the Email protocols not supported by ICI, such as MAPI/RPC of Microsoft Exchange Server etc.

Sample Implementation

Administrator setup a specific Email account on the Email server where all the Emails received (by all Email accounts) will be forwarded to. Then, Administrator can setup the following services where ICI system will retrieve the Emails (as scheduled) from the specific Email account of Email server.

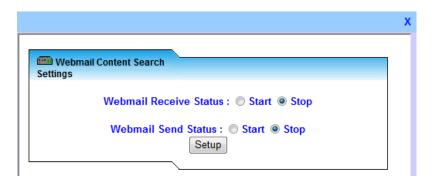


Logger ServicesThis section allows the Administrator to start or stop the logger services – protocols decoding and reconstruction.

Service	Status	Action	Setup
Active Directory Capturing Module	Start	Stop	
FTP Capturing Module	Start	Stop	
On-Line Game Capturing Module	Start	Stop	
Google Talk Message Capturing Module	Start	Stop	
Google Talk Voice Capturing Module	Start	Stop	
ICQ Capturing Module	Start	Stop	
IMAP Capturing Module	Start	Stop	
IRC Capturing Module	Start	Stop	
MSN Official Server Capturing Module	Start	Stop	
MSN Turn Server Capturing Module	Start	Stop	
MSN Proxy Server Capturing Module	Start	Stop	
MSN SIP Capturing Module	Start	Stop	
MSN P2P Capturing Module	Start	Stop	
MSN RTP Capturing Module	Start	Stop	
MSN Webcam Capturing Module	Start	Stop	
Windows Network Neighbor Capturing Module	Start	Stop	
P2P Capturing Module	Start	Stop	
POP3 Capturing Module	Start	Stop	
QQ Message Capturing Module	Start	Stop	
QQ File Capturing Module	Start	Stop	
SKYPE Capturing Module	Start	Stop	
SMTP Capturing Module	Start	Stop	
TELNET Capturing Module	Start	Stop	
UT Capturing Module	Start	Stop	
WEB Gmail Chat Capturing Module	Start	Stop	
WEB Google Talk Capturing Module	Start	Stop	
WEBMSN Capturing Module	Start	Stop	
WEBMAIL Capturing Module	Start	Stop	Setup
HTTP Video Stream Capturing Module	Start	Stop	0: 1
HTTP Link Capturing Module	Start	Stop	Setup
HTTP File Transfer Capturing Module	Start	Stop	<u></u>
HTTP Content Capturing Module	Start	Stop	Setup
Web Page Reconstruction Capturing Module	Start	Stop	
YAHOO Message Capturing Module	Start	Stop	
YAHOO File Capturing Module	Start	Stop	
YAHOO Webcam Capturing Module	Start	Stop	

Webmail Capturing Module

This section allows the Administrator to activate or de-activate Webmail (Read and Send) content search function.



HTTP Link Module

This section allows the Administrator to activate or de-active HTTP Link search function.



HTTP Content Module

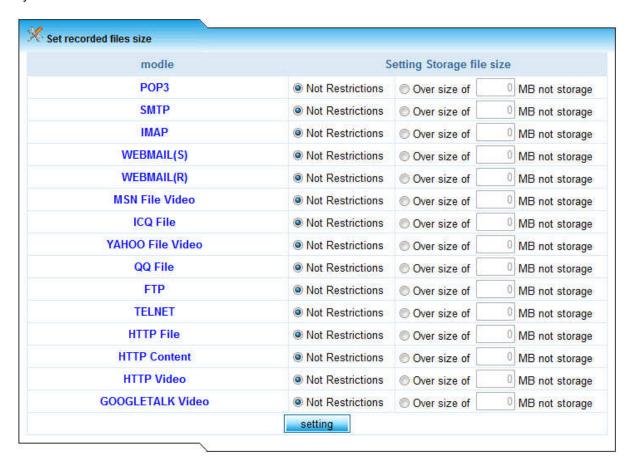
This section allows the Administrator to activate or de-activate HTTP Content search function.



Note: Without activating this setup, the system by default will not provide the search function for Webmail and HTTP Content.

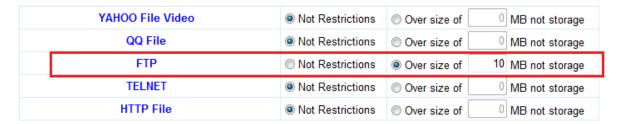
Set Logger File Size

This section allows the Administrator to set the file size limit for different Internet services which the system will reconstruct and stored.



Example:

Set FTP file limit to 10 MB. This means if the FTP download/upload file size is more than 10 MB, the system will not store this file in the system. However, the FTP log will still be obtained.

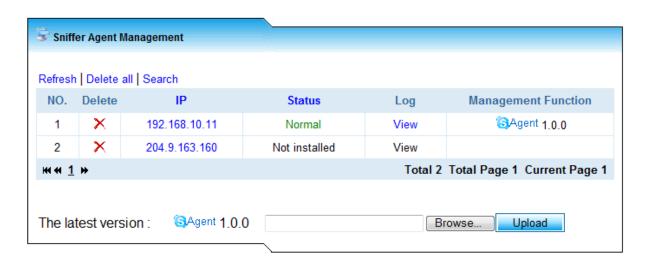


Sniffer Agent Management (Additional Paid Service)

ICI supports QQ 2010 version and Skype text message + VoIP conversation recording through the implementation of Audit/Sniffer Agent. This Audit/Sniffer Agent needs to be manually pre-installed on the targeted user's PC on the network.

Administrator needs to start the Skype Sniffer Agent service at system service setup page.





The Sniffer Agent Management page will List out the local network PC (IP Address) with Skype Agent installed or not yet installed. Administrator need to select the target PC with the Audit/Sniffer Agent installed and register it on the ED system. Administrator can refresh this page, delete and search for local PC using this management GUI.

Besides, Administrator can also update the latest version of Skype Agent once through this GUI.



Diagram: Skype Text Chat Message and Voice Call Capture by Sniffer Agent

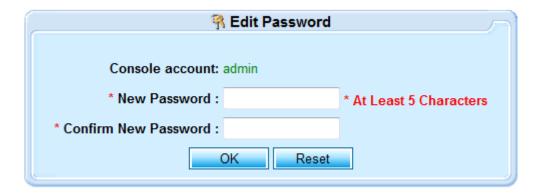


Diagram: The conversation will contain the text chat and voice call record

Note: Please ensure the Sniffer Agent (purchased) has been installed successfully at target user PC. Go to Task Manager and verified that decage.exe and s_mo.exe are running.

Edit Password

Administrator can change the system console (client console access – by putty or monitor console) and FTP access password through this GUI. The console account name is default set as "admin" and not is editable.



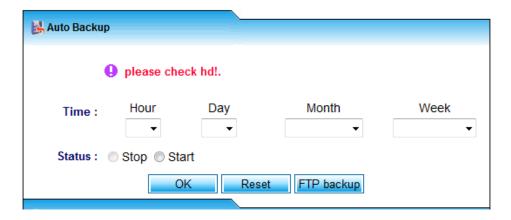
Backup Data

There are 3 configuration modes for data backup which are Auto Backup, Manual Backup and FTP Backup.

Auto Backup

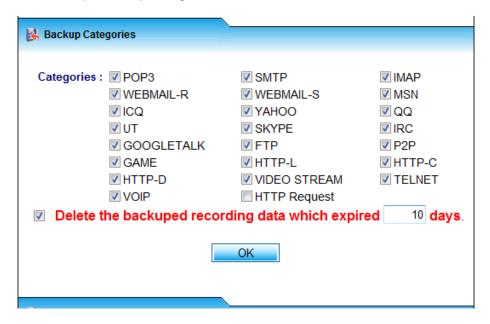
Auto Backup will automatically backup the reconstructed data files (DBtag files) into ISO file. It contains 3 sections: Scheduling, Selection of Backup Modules and Notification.

Auto Backup - Schedule



On this section, the Administrator can setup the schedule to enable the system to start the backup process automatically at pre-defined date-time. It allows the Administrator to schedule the auto backup by hour (0-24 Hour of the Day), day (1-31 Day of the Month), week (Sunday-Saturday) and month (January-December). It also allows the Administrator to upload this auto backup reconstructed data to FTP server for storage.

Auto Backup - Backup Categories



Administrator can select the service categories for backup. Administrator can also define storage days of the reconstructed data files (DBtag file) after the backup file (in ISO format) has been created.

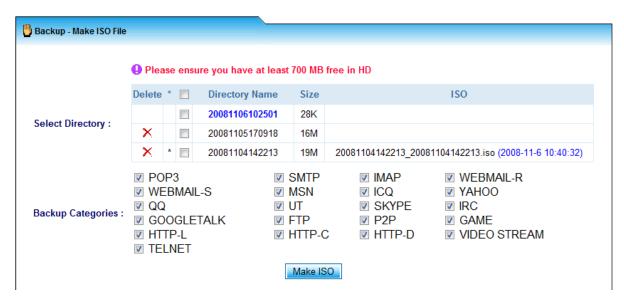
Auto Backup - Administrator Notification



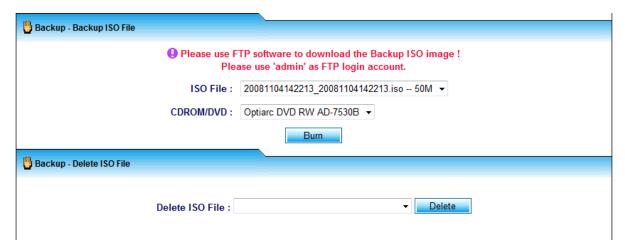
Once the system complete the automatic backup (created the ISO file at the specified date-time), the system can send notification to the defined user Email.

Manual Backup

This section allows the Administrator to create backup ISO file manually. Administrator can select the reconstructed data files (DBtag files) and backup service categories for backup into ISO format before burning out in to CD/DVD or export into external storage.



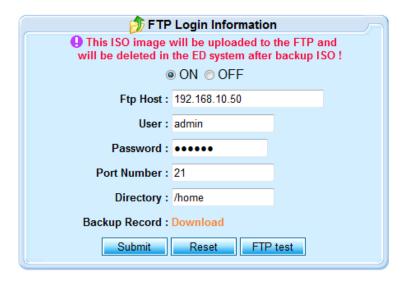
Backup ISO files can be burned into CD/DVD or can be exported out or downloaded by FTP Client (with Console username/password). Backup ISO files can also be deleted.



FTP Backup

FTP Backup function allows the Administrator to upload Backup ISO file to a storage server such as NAS and SAN via FTP upload. It will upload the Backup ISO files created by Auto Backup to the FTP storage server. Please ensure that the Storage Server to support FTP upload function.

Note: User can opt to purchase Backup Server System from ICI which will allow user to store Backup ISO file and viewing the Backup ISO file.

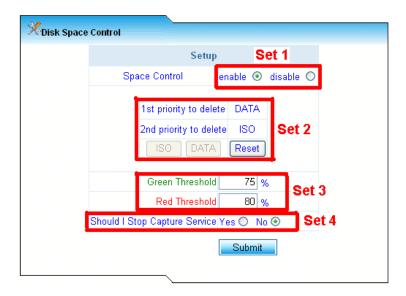


Features in this GUI:

- 1) FTP Host: The FTP server IP address where the backup ISO file is to be sent to
- 2) User: The FTP username account.
- 3) Password: The FTP password.
- 4) Port Number: The FTP port number used to transmit the data
- 5) Directory: The directory where the backup ISO file is stored.
- 6) Backup Record: User can download the ISO file after it has been uploaded successfully to FTP server.
- 7) ON/OFF is to activate/de-activate the FTP backup function.
- 8) Click on [Submit] button to save the setting. Click on [Reset] button to clear up all values on each field
- 9) FTP Test: To test the FTP server/storage connection

Disk Space Control

The Disk Space Control allows Administrator to control the data storage inside the hard disk of the ICI system with Red Threshold and Green Threshold setting.



Set 1: Enable or disable the disk space control function.

Set 2: Select either ISO Backup File as first priority or DATA file as first priority. Administrator can reset the setting by click on the [Reset] button.

Set 3: Red Threshold and Green Threshold Setting. Red Threshold is the hard disk space capacity in % where it will trigger the alert for delete off the old data (%) defined by Green Threshold. For example: Red Threshold is set at 80% and Green Threshold is set at 50%. When the hard disk space reaches 80% capacity, it will delete off 30% of the older data from the hard disk.

System Status

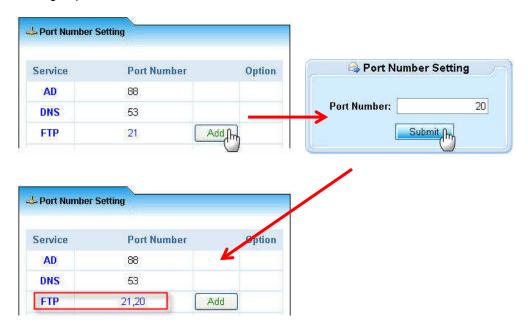
Port Number

This function allows the Administrator to inspect each protocol and set the port number value for those service categories where the port number is variable. Administrator can add and delete port number manually for different defined Internet protocols.

	→ Port Number Setting					
Protocol	Ports		Comment			
SMTP	0	FIXED	SMTP Service			
POP3	0	FIXED	POP3 Service			
IMAP	0	FIXED	IMAP Service			
FTP	21,3128	Add	FTP Service			
TELNET	23	Add	TELNET Service			
AD	88	FIXED	Active Directory Service			
NBNS	137	FIXED	NetBIOS Name Service			
MSN	1863	FIXED	Official Message Service			
MSN	443	FIXED	Peer-to-peer Data			
MSN	5060	FIXED	Session Initiation Protocol Register			
MSN	3128,8080,80,443	Add	Message Service via HTTP Proxy			
MSN	0	FIXED	Peer-to-peer Data Transfer			
MSN	0	FIXED	Real-time Transport Protocol			
MSN	0	FIXED	Webcam Video Transfer			
WEBMSN	80	Add	Official Web Messenger			
YAHOO	0	FIXED	YAHOO File Service			
YAHOO	5100	FIXED	YAHOO Video Service			
YAHOO	5000,5001	FIXED	YAHOO Voice Service			
ICQ	5190,3128	Add	Official Message Service			
QQ	0	FIXED	Official Message Service			
QQ	0	FIXED	Official File Service			
P2P	0	FIXED	Peer-to-peer File Transfer Service			
GAME	0	FIXED	Online game Service			
SKYPE	0	FIXED	SKYPE Service			
www	80,3128	Add	WWW Service			
WEBMAIL	80,3128	Add	Webmail Service			
WEBCHAT	0	FIXED	UT Webchat Service			
WEBCHAT	0	FIXED	Google Talk in Gmail Service			
WEBCHAT	0	FIXED	Google Talk Webchat Service			
WEBVIDEO	80,3128	Add	Web Video Streaming Service			
GOOGLETALK	0	FIXED	Google Talk Message Service			
GOOGLETALK	0	FIXED	Google Talk Voice Service			
IRC	6667	Add	IRC chat			

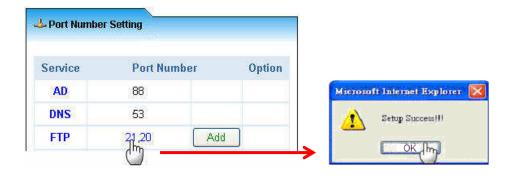
Add New Port

By clicking on the [Add] button, Administrator can add new port number. Click [Submit] to finalize the adding of port number.



Delete Port Number

By clicking on the port number, admin can delete the port number for the particular service.



Online IP

Online IP will List out all the IP addresses with Accounts on the targeted organization network automatically. ICI system will auto detect these online IP addresses through network packets transmitted and collected from the organization network.



Features in this Online IP GUI:

- 1) Online IP List: Click to refresh the Online IP List content.
- 2) Add/Delete: To create, delete and auto search for Online IP
- 3) Set IP: To hide or skip certain IP.
- 4) Import/Export IP: To import IP List or export the Online IP List
- 5) Skipped IP List: List out all IP that is not recorded.
- 6) Search: To search for IP or account.
- 7) Account Detection: Start or stop the service of Account Detection
- 8) Mail Report: Send online IP List report to a specific Email.

Add/Delete - Create IP

Administrator can create IP List with PC Name and Group.

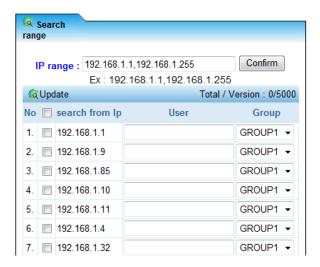


Add/Delete - Delete

Administrator can also delete the IP List by tick the IP check box at the Online IP List page. Then, click on Add/Delete – Delete to delete the IP record.

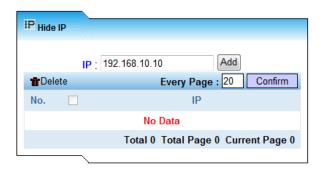
Add/Delete - Search

Administrator can also search for the IP in the organization network by subnet.



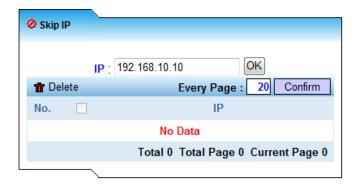
Set IP - Hide IP

Administrator can hide the IP record so that the specific IP information related to the particular IP will not be displayed.



Set IP - Skip IP

Administrator can skip specific IP so that all information related to this specific IP will not be captured.

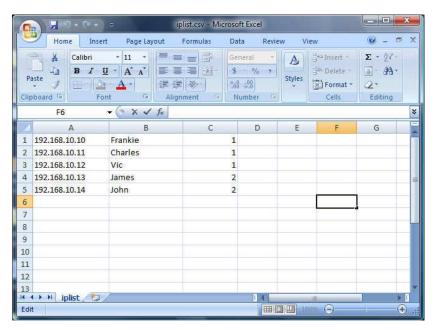


Import/Export IP

Administrator can import targeted IP List in Excel file format into the ICI system. Besides, Administrator can also download the IP List. Format: IP, PC NAME, GROUP. Please save the Excel file as *.CSV



Import Excel File Format



Skipped IP

Skipped IP will display the IP addresses skipped and not captured by the system.

Date	IP
2008-10-27 17:17:54	74.6.155.239
2008-10-27 17:17:54	192.168.1.21
2008-10-27 17:17:53	119.160.243.113
2008-10-27 17:17:53	124.108.103.241
2008-10-27 17:17:52	192,168.1.121
2008-10-27 17:17:52	192,168.1.190
2008-10-27 17:17:49	119.160.245.215
2008-10-27 17:17:09	211.75.83.5
2008-10-27 17:17:09	192.168.1.33
2008-10-27 17:17:05	74.125.19.127
2008-10-27 17:17:05	211.75.83.7
2008-10-27 17:17:05	211.75.83.3

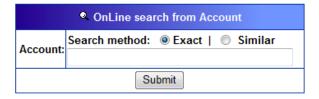
Search IP

This section allows the Administrator to search for a specific IP address.



Search Account

This section allows the Administrator to search for a specific account.



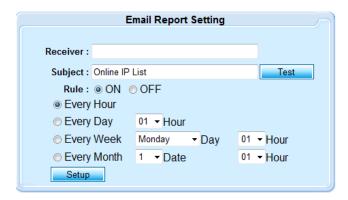
Account Detection

This section allows the Administrator to start or stop the account detection service. Administrator can start or stop the account detection service for entire network (all online IPs) or Administrator can even specify to start or stop the account detection service for specific online IP.



Mail Report

This section allows the Administrator to send Online IP List Report to Administrator through Email.

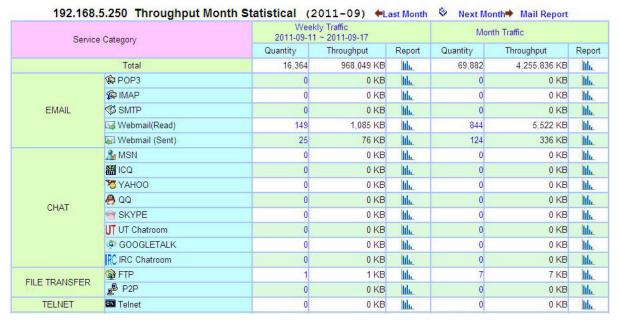


Online IP List - Traffic Statistics and Traffic Content

Online IP - User IP Statistics

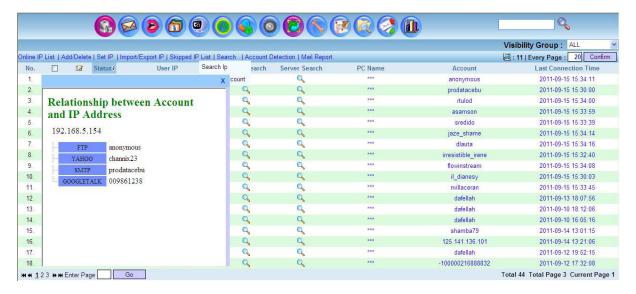
When click on the User IP, Administrator can obtain the Daily Throughput Statistical Report of that particular IP.





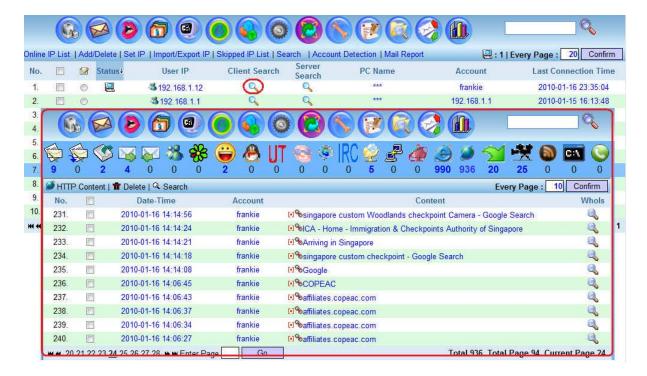
IP Relationship

Click on the icon as shown in below diagram will provide you the List or related user accounts of various Internet services for that particular user IP.



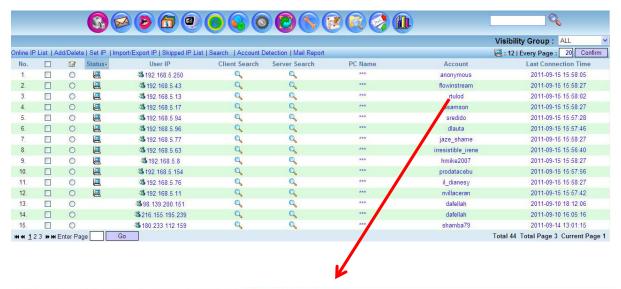
Client Search

Click on the following client search will provide you all the traffic content of that particular user IP – client.



Online IP - Account Statistics

Account Statistics will show you the daily throughput statistics of that particular user account.



Total Throughput Statistical Report >> flowinstream Throughput Month Statistical

Service Category Total			Weekly Traffic 2011-09-11 ~ 2011-09-17		Month Traffic		
		Quantity	Throughput	Report	Quantity	Throughput	Report
		13,577	511,479 KB	lth.	53,828	1,674,572 KB	Ith
EMAIL	© POP3	0	0 KB	lth	0	0 KB	lth
	MAP IMAP	0	0 KB	Ith	0	0 KB	Ith
	ॐ SMTP	0	0 KB	lih	0	0 KB	lth
	₩ Webmail(Read)	14	903 KB	lth	32	2,332 KB	lth
	Webmail (Sent)	2	10 KB	lth	6	69 KB	lth
	<u></u> MSN	0	0 KB	Ith	0	0 KB	Ith
	₩ ICQ	0	0 KB	lth	0	0 KB	lth
	73 YAHOO	14	152, <mark>402 K</mark> B	III	28	558,520 KB	lth
CHAT	<u>@</u> 00	0	0 KB	lth	0	0 KB	lth.
CHAI	⊗ SKYPE	0	0 KB	lili	0	0 KB	III
	UT UT Chatroom	0	0 KB	lth.	0	0 KB	Ithu
	GOOGLETALK	0	0 KB	Ith	0	0 KB	lth
	RC IRC Chatroom	0	0 KB	lth	0	0 KB	Ith
II E TDANICEED	FTP	0	0 KB	III	0	0 KB	Ithu
ILE TRANSFER	₽ P2P	0	0 KB	lthe	0	0 KB	Ith
TELNET	Telnet	0	0 KB	Ith	0	0 KB	III

Login List

It shows all login attempts to the ICI system (whether it is a successfully login or a failed login). Information obtainable includes IP, Login ID, Login Date-Time and Login Language.



Update

Update section allows the Administrator to upload update patch released to update and upgrade the system.

Step 1: Administrator browses for the update patch (file) and upload the file to the system.



Step 2: If upload is successful, click on [Execution] to run the Update process.

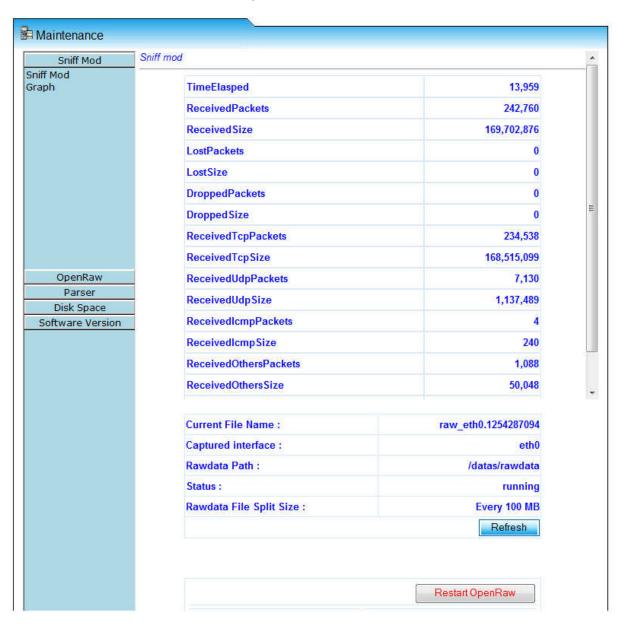


Step 3: Check on the Update Detail Files and History of update packages List for successful update of the system.



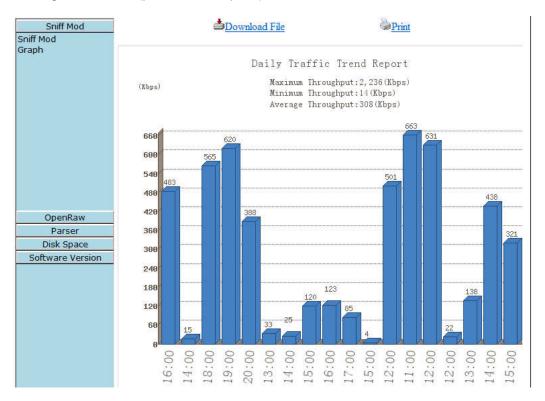
Maintenance

This feature allows the Administrator to check on the system main processes status or health condition which includes Sniff Mod, OpenRaw, Parser, Disk Space and Software Version. You may refresh or restart the services if necessary.



Sniff Mod: Packet capturing process. This process is responsible for collecting raw data from the Capturing Network Card Interface. Click on [Refresh] button to view the increment of raw data collected and to check whether raw data is being captured using mode of operation like Mirror Mode. You can also check on the network throughput by clicking on Graph.

Sniff Mode Graph showing the maximum throughput, minimum throughput and average throughput of the targeted network (point of interception).



Open Raw: Raw data packets service categorization process. This process is responsible to categorize raw data according to different services/applications/protocols.

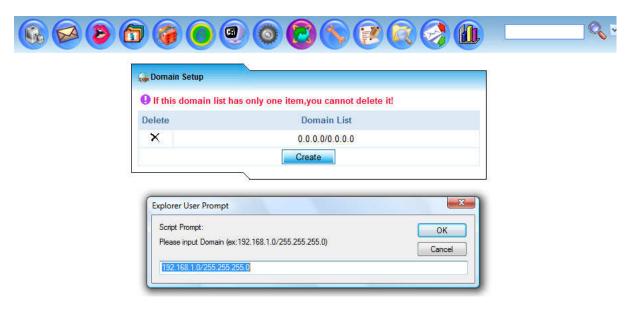
Parser: Raw data decoding and reconstruction process. This process is responsible to reconstruct the raw data which has been captured and categorized. Administrator may check on incremental of the session in the different parser processes. If the certain parser process/service does not show the result, you may press the [Restart] button to restart the process.

Disk Space: Displays the system drives and file system information (size, available space, used space etc.)

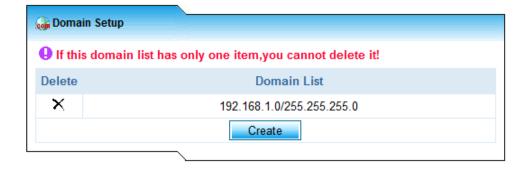
Software Version: Displays the version of different parser function/service.

Domain

This section allows the Administrator to set the domain or subnet. If domain is set, ICI will only capture and reconstruct Internet traffic from that particular domain set. By default, ICI captures and reconstructs Internet traffic from all domains.



Create a new domain by clicking on [Create] and the Domain Setting Windows will pop up. Input domain by ex: 192.168.1.0/255.255.255.0. Click [OK] to complete.



Implementation sample:

You may have a network with 1000 users with 5 subnets or domains. However, you may only want to include one domain users for monitoring. For instant, you only want to include 192.168.1.0/255.255.255.0 domain for monitoring.

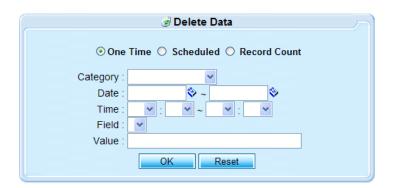
System Tools

Delete Data

A. Delete Data by Category

One Time Delete

Administrator can delete data based on specific category or protocol such as Email, FTP, Chat, HTTP, Webmail, and Telnet in the category List.



Features in this GUI:

- 1) Mode: choose what data type you want to delete, e.g. POP3
- 2) Date & Time: Delete the data within the period specified
- 3) Field: Specify the record such as IP, sender, receiver
- 4) Value: The value of the item of record

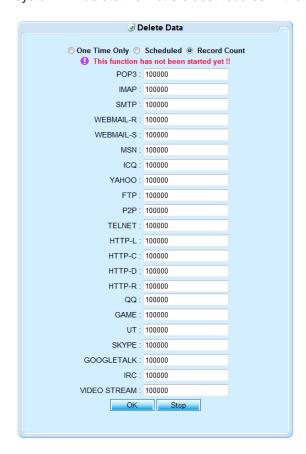
Scheduled Delete

Administrator can delete all data records at specific scheduled time.



Record Count

Administrator can specify the threshold record for each service category. The Administrator can specify a number which the system can keep the record. Only the latest number of records is left if the actual number of record exceed the threshold specified (FIFO theory apply). For example: The threshold number for the data type POP3 is 50. The actual number of records for POP3 is 55. ED system will delete the first 5 oldest records in the POP3 and keep the latest 50 records.



B. Delete All Data

Administrator can select to delete all data with or without configuration through this Delete All Data section.

Authority

This section allows the Master System Administrator to assign different levels of authority for users to login to the ICI system for viewing or configuring the system.

Visibility Group

This section allows the Administrator to setup Group of Users with different visibilities. For example, the Administrator can create a Group known as Sales Department Visible Group. Then, the Administrator can define what this Group can view (view all or view none or view with selected exceptions) as shown in diagram below. Please refer to screen shot below for setting up the Visibility Group. The Administrator can select Finish then complete this Visibility Group setting or click next to go to next Authority configuration.

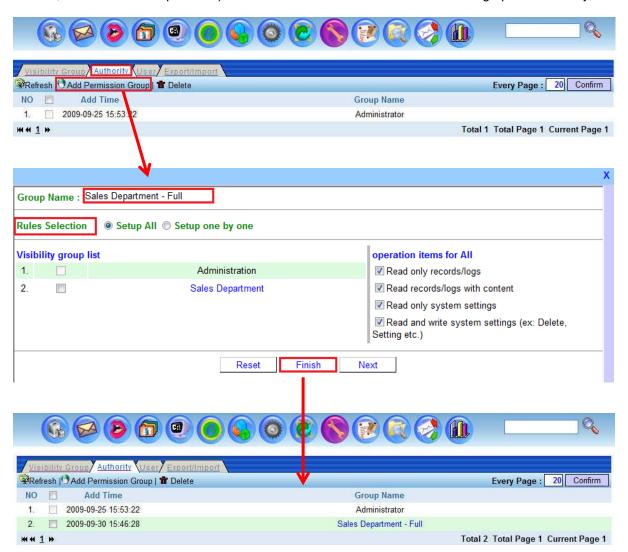


Viewing by Visibility Group at ED Management GUI



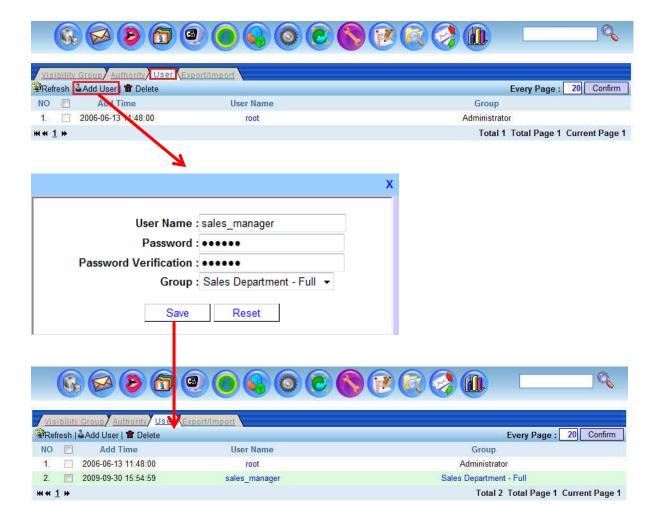
Authority

This section allows the Administrator to setup the visibility group with different operating authorities (by setting up 4 different rules: read only recorded record, read recorded content, read and set the content, read and write capabilities). Please refer to screen shot below for setting up this Authority.



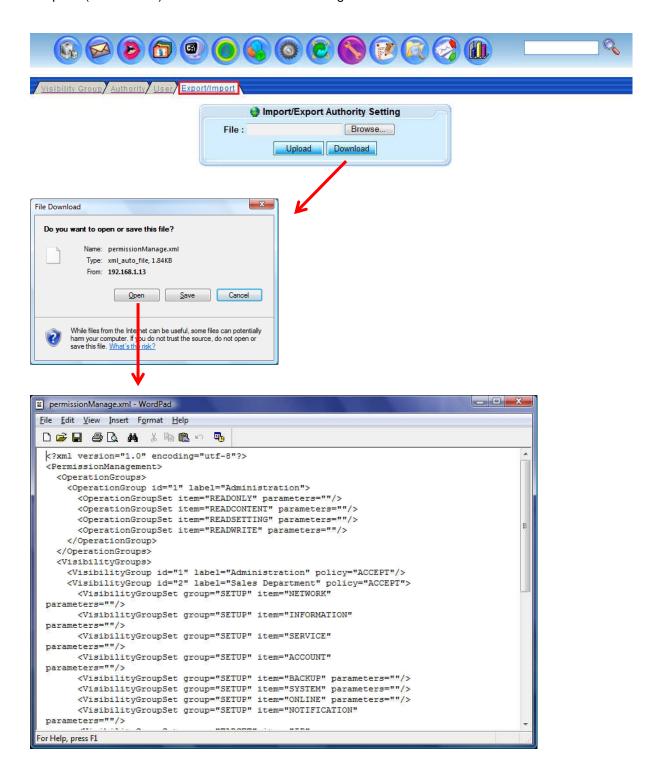
User

This section allows the Administrator to create the users. It also allows the Administrator to assign the Group to the specific user created. Please refer to screen shot below for the setup of the User Group.



Import/Export

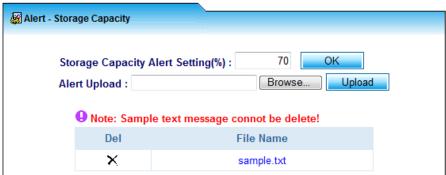
This section allows the Administrator to import or export the users with pre-defined setup. The template (XML format) can be downloaded for editing.



Storage Alert

Storage Alert consists of the follow: Alert – Storage Capacity, Alert – Notification Parameters and Alert – Daily System Status Report.

Storage Capacity



Administrator can define the storage capacity alert. When the system storage has approach certain %, the system can send alert Email to the Administrator. Administrator can upload the sample alert Email to the system.

Notification Parameters



Administrator can specify the Email account that the alert message can be send to in Forward field. Besides, Administrator can define the subject and the alert file.

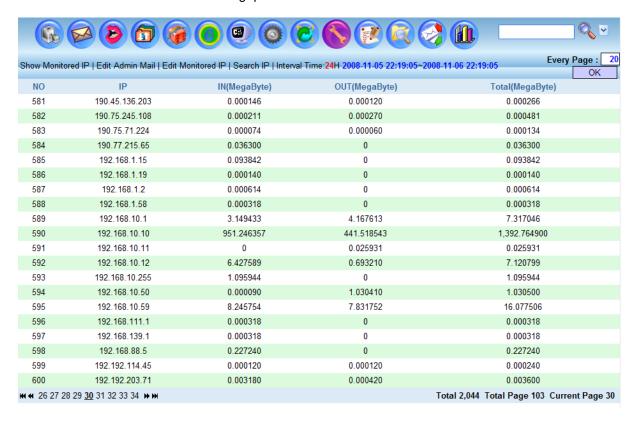
Daily System Status Report



Administrator can also setup the system to automatically send a system storage status to the Administrator Email daily.

Throughput Alert

Throughput Alert function allows Alert Email to be sent to the Administrator when the pre-defined IP has consumed and reached the throughput threshold defined.



Show Monitored IP

Click on the [Show Monitored IP] link and targets which are being monitored will be displayed. The information for each target is shown as the following diagram.



Edit Admin Mail

The following window will pop up if the link [Edit Admin Mail] is clicked. Administrator can add the admin Email account here. The alert/warning message will be sent to these Email accounts specified if there is any monitored target exceeds the bandwidth quota.



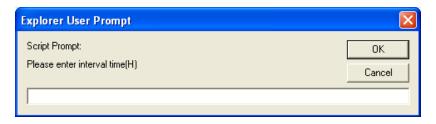
Edit Monitored IP

Admin can edit the monitored IP/PC parameters such as Bandwidth (GB), Client Mail etc.



Interval Time (H)

The interval time specify the duration that the target IP/PC is to be monitored for the throughput usage. For example: The interval time is 5 hours. ICI system time is currently at 12:00 on 12/Dec/2007. ICI system will then count the total size of information occurred between 12:00 of 12/Dec/2007 and 17:00 of 12/Dec/2007 for each target (monitored IP).

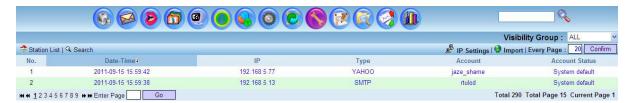


AD Import

This section provides the targeted PC or station information. It includes station List, NetBIOS PC List and AD List.

A.Station List

The section List out the Date-Time, IP Addresses, Traffic Type and Account detected.



It also includes function that allows the Administrator to manually import IP Address, Type and Account List into the system and allows retrieval or accessing of reconstructed data based on the List. Administrator can use Excel/csv file which contains the input of user account and MAC to upload to the system.

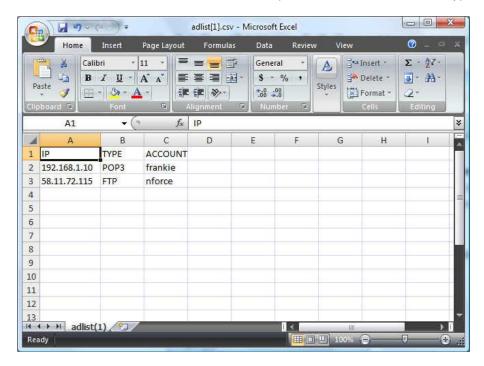
By clicking on the [IP Settings] Administrator can edit the IP Setting by manually input IP and match with Type of Services and Account Name.



By clicking on [Import] icon, the following window will appear and user can upload the Excel/csv file containing the pre-defined IP-Type-Account to the system.

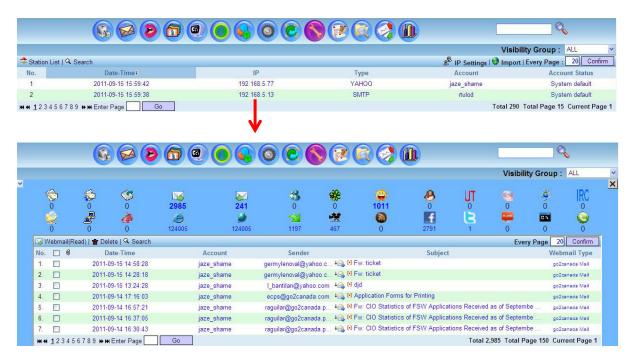


Excel/csv file that can the Administrator can pre-defined the IP Address, Type and Account.



Search by IP Address or Account

The Administrator can click on the IP Address or Account to find the data related to that particular IP Address or Account.



B. NetBIOS PC List

NetBIOS (Network Basic Input/Output System) normally runs over TCP/IP, gives each computer or PC in the network both a NetBIOS name and an IP address corresponding to a (possibly different) host name. ICI system can display the NetBIOS PC List on the network and Administrator can search the related reconstructed data based on this List as shown in diagram below.



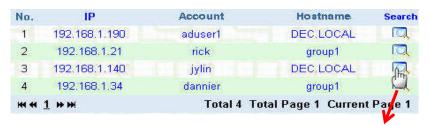
C. Active Directory Account List

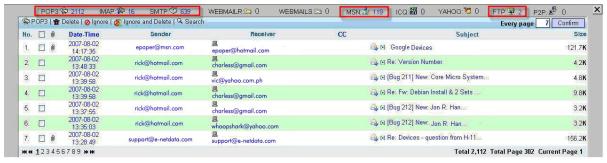
When there is Active Directory (AD) server running on the network, Administrator can start the AD Server service at SETTING – SERVICES. Therefore, the system will auto retrieve and show the IP and AD Account for all categories of data reconstructed as shown diagram below. Administrator can also search the related information from particular AD account.

Besides this automatic AD account retrieval function (which might not work in some network environment due to network implementation architecture), we also provide an AD Probe tool which allows AD server to manually send this AD account information to ICI system.



Similar Search for Particular AD Account





Registration

This page shows the system registration information. For system registration and activation, please follow the below steps.

Signature File

Step 1: Enter the Serial Number and click on [Download Signature File] to download the Signature File. Sample format of the Signature File is signature_file_DC071121N1027NY8.



Step 2: Please send the Signature File by email to $\underline{\text{support@level1.com}}$ with the subject : ICI License File Request.

Step 3: After Registry has been verified the details, it will send the user the license file with the format like license_file_DC071121N1027NY8.

Step 4: Upload this license file to ICI system for service activation.



Step 5: Successful registration will show the user license and expiry date as shown below.



If the registration process fails (shown by Error message), please download register_import.log and send it to support@level1.com

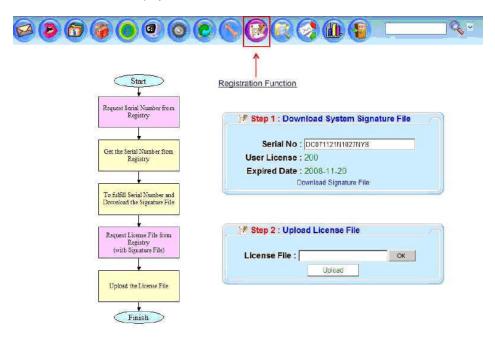


VoIP License

Voice over IP License (Optional Purchase) is to be uploaded at this Registration GUI as well. The license file will be named "licence.txt."



By default, the ICI system (appliance based) shipped out is already pre-registered. Please check by clicking the registration page. You will be able to see the following diagram with the serial no, user license and license expiry date.



You can also check from the login page. Information like N/ED2-1.0.0:20 (ED version 2-1.0.0 and this system supports a maximum of 20 concurrent users) will be shown when the pointer is placed at the ICI system, Login ID or Password.



Data Search

Full Text Search

Full Text Search provides the capability of searching into the database content of Email (such as POP3, SMTP, IMAP, Web Mail, IM Text Chat etc with the key word(s) inputted by the user. It is even capable to search in to attachment, file transfer, zipped file etc. and Listed the output result that contains the matching search criteria.

Key word(s) search supports full Boolean Algebra concept. For full details of Full Text Search, please refer to Appendix in this guide.

string up to 32 words, 128 bytes per word

& AND

OR

NOT

NEAR

Logic Application " "

These 5 symbols, cannot be at the end of a word, such

as "love@", system will filter out automatically

Alphabet A, B, C,...

Number

? * Wildcard search

? represent one alphabet * represent multiple alphabet

First search character cannot be wildcard character

For example:

li?e => to find out similar words like => live, life

li ***e** => to find out similar words like => live, life, license, little

Following are the limitation of Full Text Search:

Natural language. Some of the words as follow will be automatically neglected by Full Text Search engine as it would have appeared too many times in the database content. Therefore for accuracy and performance, we neglect these words which we have known in as "Stop Words".

For example: "and", "are", "as", "at", "be", "but", "by", "for", "if", "in", "into", "is", "it", "no", "not", "of", "on", "or", "such", "that", "the", "their", "then", "there", "these", "they", "this", "to", "was", "will", "with"

Does not support a single English alphabet search. Same concept as "Stop Words"

For example: "a", "b"

User can input key word or IP and press on and the system will query and List out the content that match the search criteria as shown below.



Select and click on the application List (with the relevant number of hit), system will then List out all the record of that application.



Export Search Records Export the query result as Excel .csv file.



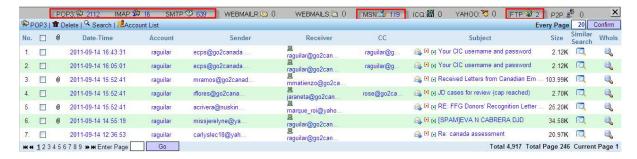
Similar Search

It provides relative search function which search for similar words, account names etc. in the database and display them according to application.

The key source of search is from:

Similar Group	Words Source
SMTP, POP3, IMAP, WEBMAIL	subject from to cc bcc attachments content
ICQ, MSN, QQ, YAHOO	sender receiver messages
P2P, FTP	account filename

Click on <a> and the Similar Search function will show the results in subsequent diagram.





Data Search – Conditional or Parameter Search

The system provides advanced Data Search (Conditional or Parameters Search) function. Information or data recorded can be searched based on different applications and parameters set.

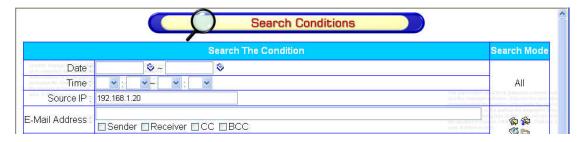
	Search Parameters	Search Category History Quer
Date :	♦ ~	
Time :	▼: ▼~ ▼: ▼	All
Source IP :		
Email Address :	Sender Receiver CC BCC	\$\frac{1}{2}\$
Subject :		
Webmail Type :	▼	□
FTP Server :		<u> </u>
FTP User :		
P2P Tool:	▼	
P2P File :		
Game Name :	Æ	
MSN Account :	1. 2. User Handle Participants	20
ICQ Account :	***	
Yahoo Account :	1. 2. User Handle Participants	*3
QQ Account :	1. 2. User Handle Participants	@
UT Account :		UT
SKYPE Account :	1. 2. User Handle Participants	8
GOOGLETALK Account :	1. 2. □ User Handle □ Participants	©
IRC Account :	IRC	
URL:		<i>∅ № № ★</i>
Telnet User :		C:X
VOIP Account :	1. 2. Caller Callee	•
Other:		All
	Reset Search Close Save As	

Search Parameters by Application or Service Category

Item	Description	Example
Date	From X to X: Format Date (Year/Month/Day)	2007-11-10
Time	From X to X: Format Time (Hour: Minute)	23:11
Source IP	The IP address to search	192.168.1.100
Email Address	The Email address in Sender, Receiver, CC or BCC	frankie@abc.com
Subject	The subject or title keywords	Hello
Webmail Type	The webmail type	Yahoo
FTP Server	The FTP IP address	192.168.1.249
FTP User	The FTP user account	admin
P2P Tool	The P2P tool use	LimeWire
P2P File	The P2P file name	Abc.mp3
Game Name	The name of the online game	Kartrider
MSN Account	The account of MSN (User Handle/Participant)	abc@hotmail.com
ICQ Account	The account of ICQ (User Handle/Participant)	11244567
Yahoo Account	The account of YAHOO (User Handle/Participant)	abc@yahoo.com
QQ Account	The account of QQ (User Handle/Participant)	23456995
НТТР	URL Link	www.yahoo.com.au
Telnet User	The user account	
VoIP Account	SIP Caller and Called Number	
Other	Searching the related information from all data type by the keyword	Movie, Carlos, Tom

Example: Search the records of specific source IP

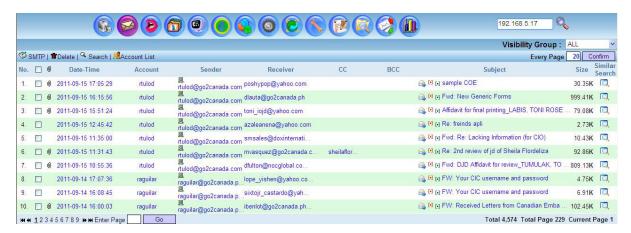
Step 1: Type the Source IP "192.168.1.20" and click on the button [search].



Step 2: Result will be shown.



Step 3: Click on the SMTP icon above, the records will be shown as the following diagram.

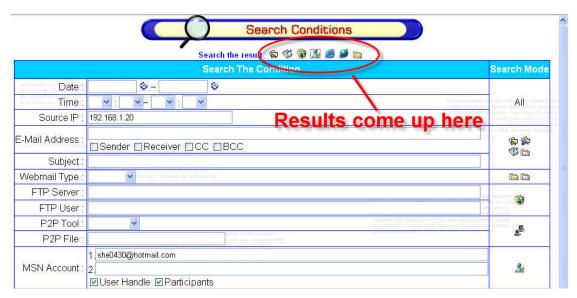


Example: Search the records of specific source IP and MSN account.

Step1: Type the Source IP "192.168.1.20", Msn account "she0430@hotmail.com" and click on the button [search].



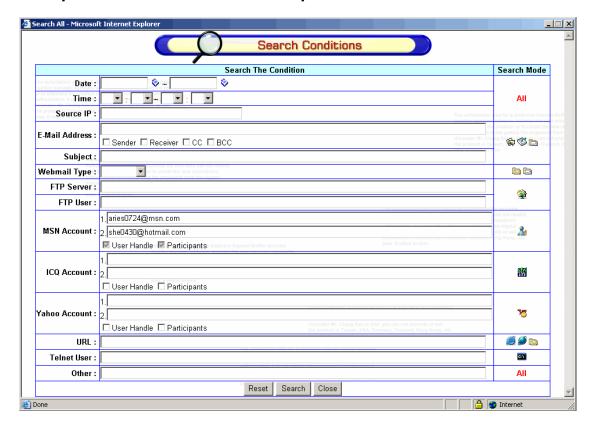
Step 2: Result will be shown.



Step 3: Click on the MSN icon above, the records will be shown as the following diagram.

Å MSN 🛣 [Delete 🤍 Displa	ıy set 🤏 Search		Show Mode: ① IP 〇 PC Na	me Every page 20	Confirm
No. 🔲 🛭	Date-Time	IP	User Handle	Participants	Conversation	Count
1.	2007-04-24 08:39:42	192.168.1.20	she0430@hotmail.com	kenlee6979@hotmail.com	Conversation	23
2.	2007-04-24 08:31:48	192.168.1.20	she0430@hotmail.com	ssm3188@hotmail.com	Conversation	0
3 innov Mr. Cha the product in Tal	2007-04-23 14:56:08	192.168.1.20	she0430@hotmail.com	sunny824@pchome.com.tw	Conversation	2
4.	2007-04-23 14:18:47	192.168.1.20	she0430@hotmail.com	test3@decision.com.tw	Conversation	5

Example: Search the records of the specific MSN account.



The data search based on the search parameters of user reference account (user handle) and participant reference account. User reference account as [aries0724@msn.com] and participant reference account [she0343@hotmail.com].



So it can be categorized as two combined groups:

- 1. User reference account as [aries0724@msn.com] and participant reference account [she0343@hotmail.com].
- 2. User reference account as [she0343@hotmail.com] and participant reference account [aries0724@msn.com].

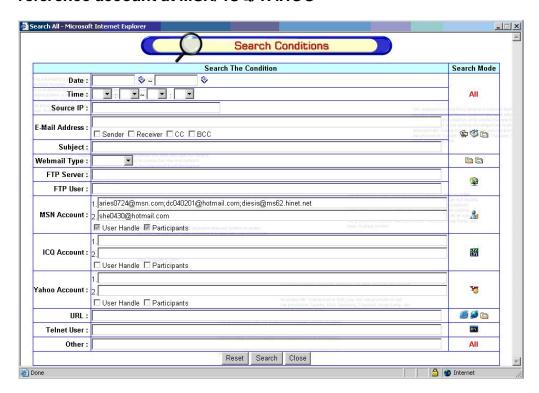
Instruction:

When you key in two textbox column, the first textbox column is as single account [dc@level1.com], the second textbox column is as single account [web@level1.com], then checkbox column will be enabled.

It is not allowed to modify and search the data as below:

[(user reference account = dc@level1.com and participant reference account = web@level1.com) or (participant reference account = web@level1.com and user reference account = dc@level1.com)], then use "and" combining the other search row with other application.

Example: Input two or three user reference accounts and one participant reference account at MSN/ICQ/YAHOO



The data search based on the search parameters of user reference account aries0724@msn.com or decount-aries0724@msn.com or decount-aries0724@msn.com



So it can be categorized as three combined groups:

- 1. User reference account as [aries0724@msn.com] and participant reference account [she0343@hotmail.com].
- 2. User reference account as [dc040201@hotmail.com] and participant reference account [she0430@hotmail.com].
- 3. User reference account as [diesis@ms62.hinet.net] and participant reference account [she0430@hotmail.com].

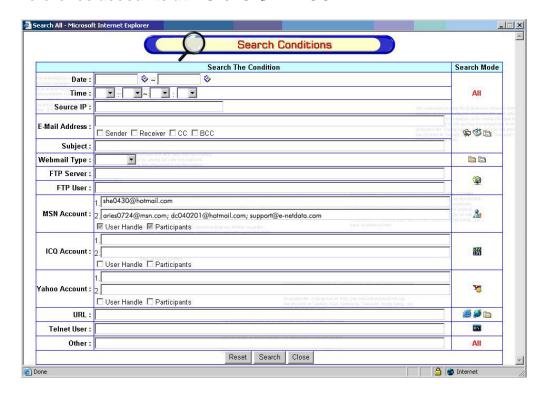
Instruction:

When you key in two textbox column, the first textbox column is as [web@level1.com; ken@level1.com] for multi-account (maximum only 3 multi-account), the second textbox column is as single account [web@level1.com], then checkbox column will be enabled.

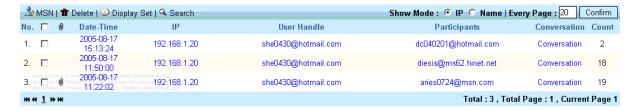
It is not allowed to modify and search the data as below:

[(Participant reference account = dc@Level1.com and user reference account = web@Level1.com) or (user reference account = Ken@Level1.com)], then use "and" combining the search of other row or application.

Example: Input one user reference account and two or three participant reference accounts at MSN/ICQ/ YAHOO.



The data search based on the search parameters of user reference account she0430@hotmail.com and participant reference account aries0724@msn.com or dc040201@hotmail.com or <a href="mailto:dc040201@hotmail.com



So it can be categorized as three combined groups:

- 1. User reference account as [she0343@hotmail.com] and participant reference account [aries0724@msn.com]
- 2. User reference account as [she0430@hotmail.com] and participant reference account [dc040201@hotmail.com]
- 3. User reference account as [she0430@hotmail.com]and participant reference account [diesis@ms62.hinet.net]

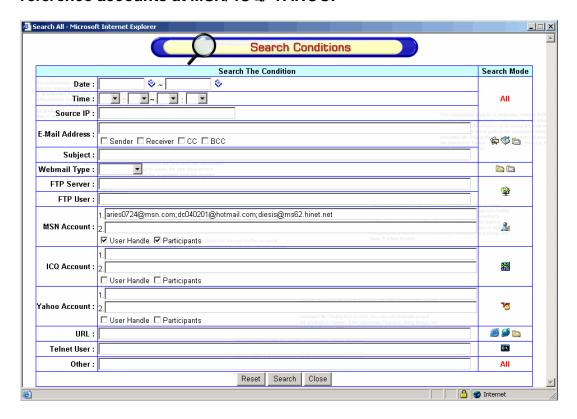
Instruction:

When you key in two textbox column, the first textbox column is as single account dc@Level1.com, the second textbox column is as multi-account [web@Level1.com]; ken@Level1.com (maximum only 3 multi-account), then checkbox column will be enabled.

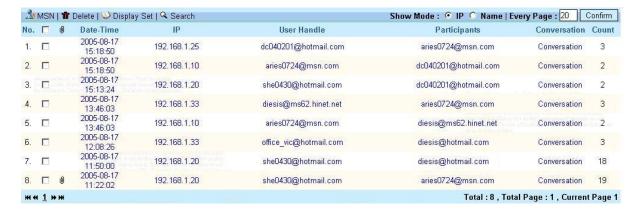
It is not allowed to modify and search the data as below:

User reference account = dc@Level1.com and participant reference account = web@Level1.com or participant reference account = ken@Level1.com, then use "and" combining the other search row and application.

Example: Input two or three user reference accounts without key in participant reference accounts at MSN/ICQ/ YAHOO.



The data search based on the search parameters of user reference account or participant reference account aries0724@msn.com or dc040201@hotmail.com or diesis@ms62.hinet.net



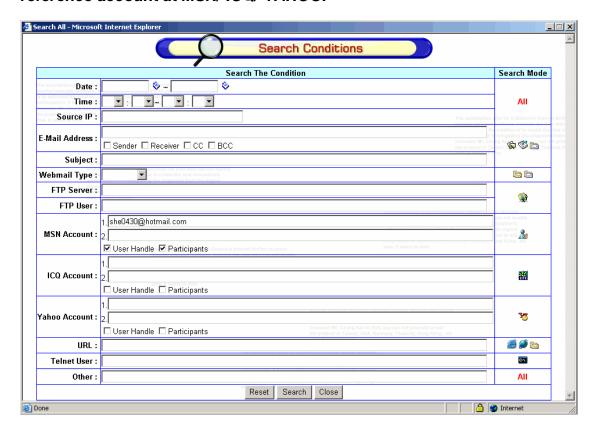
So it can be categorized as six combined groups:

- 1. User reference account as [aries0724@msn.com] and participant reference account will be as any account.
- 2. User reference account as [dc040201@hotmail.com] and participant reference account will be as any account.
- 3. User reference account as [diesis@ms62.hinet.net] and participant reference account will be as any account.
- 4. User reference account will be as any account and participant reference account as [aries0724@msn.com]
- 5. User reference account will be as any account and participant reference account as [dc040201@hotmail.com]
- 6. User reference account will be as any account and participant reference account as [diesis@ms62.hinet.net]

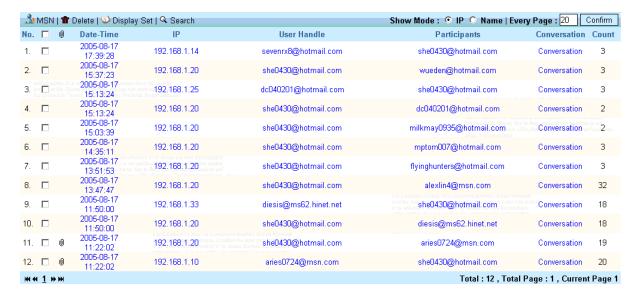
Instruction:

- When you key in the first textbox column as multi-account [dc@Level1.com, web@Level1.com] (maximum only 3 multi-account), then checkbox column will be enabled, the data will be searched like as below: user reference account = dc@Level1.com or user reference account = web@Level1.com, then use "and" combining the other searching column.
- 2. When you key in the first textbox column as multi-account dc@Level1.com, web@Level1.com (3 multi-account maximum), then only select the participant account at checkbox column, the data will be searched like as below: (participant reference account = dc@Level1.com or participant reference account = web@Level1.com), then use "and" combining the other searching column.
- 3. When you key in the first textbox column as multi-account dc@Level1.com, web@Level1.com (3 multi-account maximum), then select the participant account and user reference account at check box column, the data will be searched as below: (user reference account = dc@Level1.com or participant reference account = dc@Level1.com or user reference account = dc@Level1.com or user reference account = dc@Level1.com or user reference account = dc@Level1.com or user reference account = web@Level1.com ().

Example: Input one user reference account without key in participant reference account at MSN/ICQ/ YAHOO.



The data search based on the search parameters of user reference account or participant reference account she0430@hotmail.com



So it can categorize as two combined groups:

- 1. User reference account as [she0430@hotmail.com] and participant reference account will be as any account.
- 2. User reference account will be any account and participant reference account is as [she0430@hotmail.com]

Instruction:

- 1. When you key in the first textbox column as single account dc@Level1.com, then checkbox column will be selected only user reference account and searched the data like as below: (user reference account = dc@Level1.com) then use "and" combining the other searching column.
- When you key in the first textbox column as single account <u>dc@Level1.com</u>, then checkbox column will be selected only participant reference account and searched the data like as below:
 (participant reference account = <u>dc@Level1.com</u>) then use "and" combining the other searching column.
- 3. When you key in the first textbox column as single account <u>dc@Level1.com</u>, then checkbox column will be selected both user reference account and participant reference account, then the data will be searched like as below: (user reference account = <u>dc@Level1.com</u> or participant reference account =

dc@Level1.com), then use "and" combining the other searching column.

Association Search

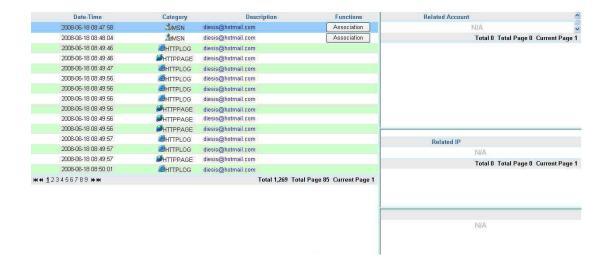
It allows the association search by Account or by IP Address.

For instance, click on Account – [SEARCH] button and a Window will pop out. You may key in to search for KEYWORD/IP/ACCOUNT. After select the search condition and input the information to search, click on [SEARCH] and the system will look up the related information in the database and List them down. You may select and click on the item Listed. It will direct you to back to the original Window and you may then select Time Interval and Protocol/Service to Search for the information you want. By clicking on [Submit], the system will search for the related information and Listed them down.

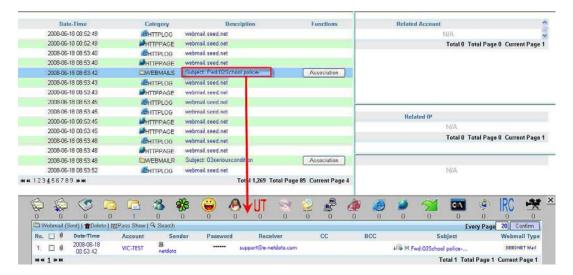








You may click on the description Listed to search for the particular record and content information as shown in diagram below.



Searching for Association or Relationship

By clicking on the [Association] at the Function column of the Listed information, you may search for account that is related to this interaction (chat/email etc.). The account related will be Listed. You may also click on the [Search Account] to List down the account that is related this account.



Captured File List

This section will List out all the files that have been reconstructed by ICI system with information such as file name, file extension, count (number of time this file has been appeared in the captured record) and file size. It also allows the Administrator to search for the file using the search function.

				<u>L</u>	
Refresh	Browse Up	load File Name :		Search Every Pa	ge 10 Confirm
No.	File Name	Extension	Count	Size	Search
1.	Reiluke_MailBruteforcer.e	exe	9	33. 82K	
2.	GDF-ED2-1.14.0-r4-100114	iso	2	463.76M	Q
3.	receiveim.mp3	mp3	2	8.20 K	
4.	GDF-ED2-1.14.0-r4-100114	iso	1	6.31M	Q
5.	GDF-ED2-1.14.0-r4-100114	iso	1	6.31M	
6.	DiagnosticCD_ED2-1-15-0.i	iso	1	166.55 M	Q
7.	br_msg.zip	zip	1	5.20 K	Q
8.	nForce Sales Forecast FY1	xlsx	1	20.87 K	Q
9.	dictmkr.zip	zip	1	142.41 K	
10.	runasdate.zip	zip	1	21.31 K	Q
≪ ≪ 1 2 >> >> Enter Pa	age Go			Total 20 Total Pag	e 2 Current Page

Search for the Captured File



Search for a file (with the similar content)

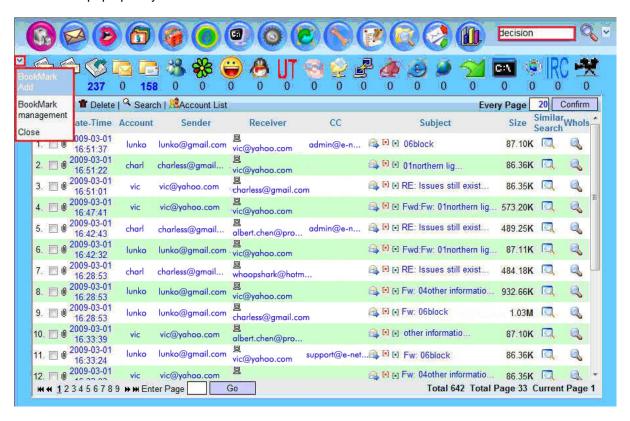
Administrator can also upload a file and try to find whether this file is found within the captured file List. In this case, the Administrator can know whether such file has been send out by anyone in the organization even the file name has been changed by the user.

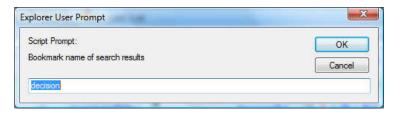


Bookmark

This function allows the Administrator to make a bookmark or record whenever he searches with the Free Text Search function. This will allow him to view back all the items that he has searched before and with the original search result.

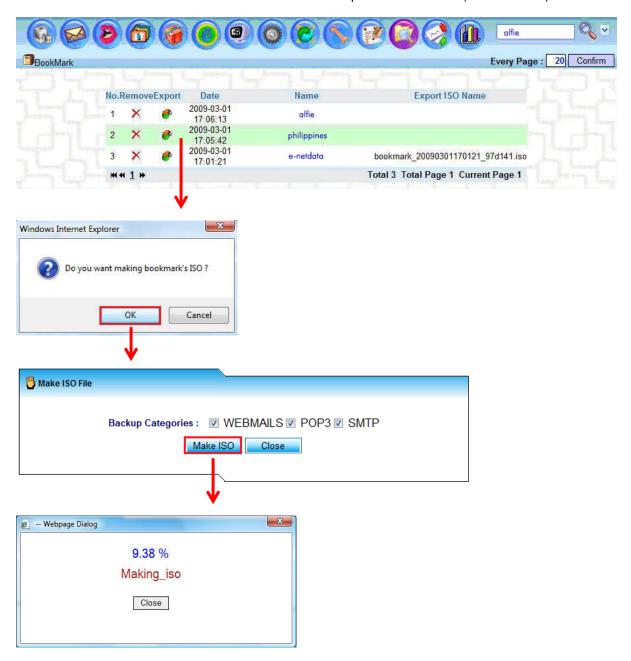
Whenever the Administrator does a Free Text Search, he can bookmark it by clicking the icon on the left hand corner of the List of result. Select [Bookmark Add] to add the record into bookmark. A Window will pop up for you to name the bookmark record.





Bookmark Management

The Administrator can delete the bookmark as well as export the bookmark (in ISO format).



The Administrator can use FTP client to access and download the ISO file from the system. The Administrator can login to the system by using FTP client with the Console/FTP username and password with port 21 or port 22.

Search for Bookmark Item

The Administrator can search for the bookmark item. This will show the previously searched and bookmarked record.



Send Mail Service

Administrator can be alerted or notified by Email (with content) if the alert condition met the parameter set. In Alert with content, Email (POP3, SMTP, IMAP and Webmail) and Chat (MSN, YAHOO, ICQ, QQ, AOL) content can be sent to the Administrator through Email if the pre-set parameters (sender account, receiver account, IP and key words) met or triggered. For example, administrator can forward all emails (POP3, SMTP, IMAP or Webmail) from account abc@xyz.com to himself/herself at admin@level1.com

Alert with Content

Administrator can set up the alert parameters based on the different service categories. Alert parameters such as sender account, receiver account and key word can be configured in each service category. The alert can be send to the specific email account(s) defined by the Administrator.



Administrator can check the alert List as well as modifying the alert rule through the alert List GUI. Besides, the Administrator can also query for the defined alert parameter through this GUI.



Alert Mail Box

Administrator needs to setup the Alert Mail Box so that all notification and alert Emails can be sent out by the system.

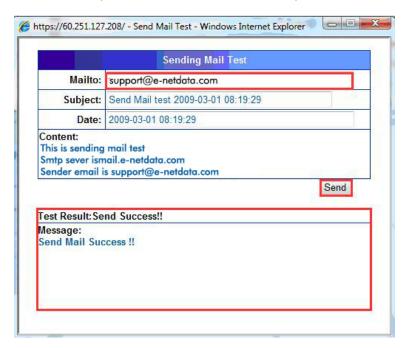


Features in this Alert Mail Box GUI:

- 1) Local/Remote: The SMTP domain name. Administrator ticks the local one if you have set up the mail server locally
- 2) Sender Email: Administrator provides one Email account for ED system for sending out the system Emails
- 3) Server requires authentication: Tick this option if the mail server used requires authentication
- 4) Account and Password: Provides the account name and its password here for authentication
- 5) The button [OK] is to submit the setting
- 6) The button [Reset] is to clear up the setting
- 7) The button [Send Test] is to test this function based on the given conditions

Testing of Mail Server Setup

The following GUI will pop up when Administrator click on the button [Send Test]. Fill in the information required to test the Mail Server setup.



Send Mail Success means that the Email can been successfully sent out. Send Mail Failed means that the system failed with send out the Email. Therefore, please recheck your Email server and username/password.

Alert Sensitive File

Administrator can upload certain files to the system. If these files are found in any of the Internet content communications, alert email can be sent to the Administrator.





Report Management

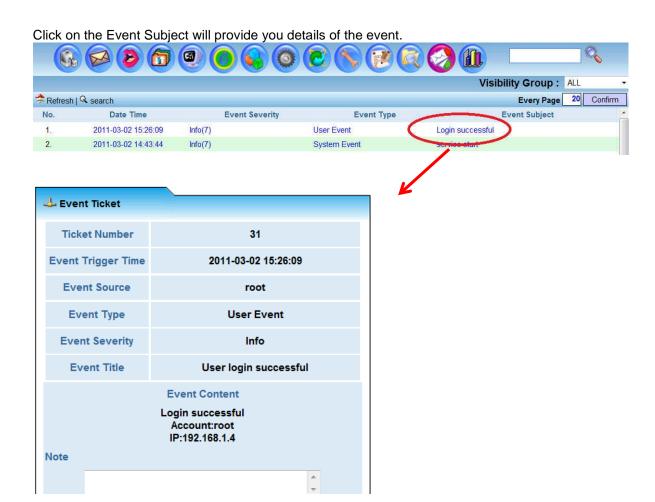
This section will List out all the scheduled reports setup by the Administrator. The Administrator can delete this schedule report delivery setup.



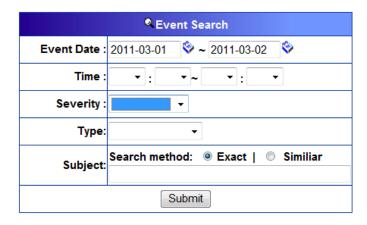
Event Management

Event Management provides logging of users' action on ICI system such as delete of record, stop of services, change of network settings etc. It provides information of Date-Time event occurred, Event Severity (Warning-5, Notice-6 and Info-7), Event Type (System Event or User Even) and Event Subject.





Event Management Search function allow you to search for particular event according to Event occur Date, Time, Severity, Type of Event and Event Subject.



Note: Do ensure that you turn on Event Log service at System Settings – Services – System Services to enable this function.

Event Trigger Management

Event trigger management allows user to alert email to be sent to Administrator whenever the specified condition met.

Step 1: Setup Alarm Report Management

Click on [Alarm Report Management] and the following Windows will appear. Input the Alarm Method Subject, Mail Receiver, Mail Subject and Mail Content and Save. Then, go to Step 2.

Alarm Method Subject :	E-Mail Administrator	
Method :	Mail Alarm 🔻	
Mail Receiver :	support@e-netdata.com	
Mail Subject :	Alarm Event - {{subject}}	
Mail Content: E-Detective Event Triggered		,

Step 2: Setup Create Alarm Rule

Click on [Create Alarm Rule] and the following Windows will appear. Select the Event Type that you want alert email to be sent and save it.

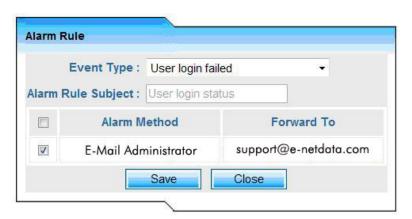




Diagram: Alarm Rules created.

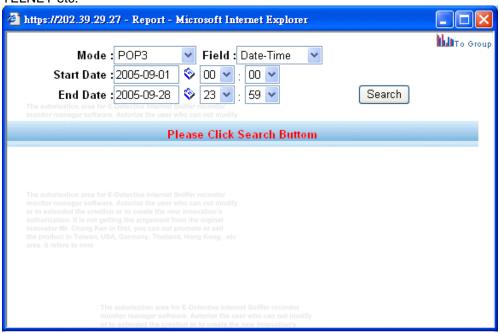
Statistical Reports

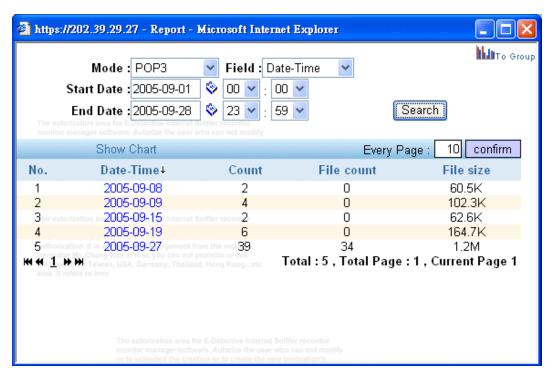
ICI system provides comprehensive statistical reporting function. It can generate different types of reports based on single application or protocol, group of users' different online activities as well as various statistical reports.

Conditional Reports (Single Report)

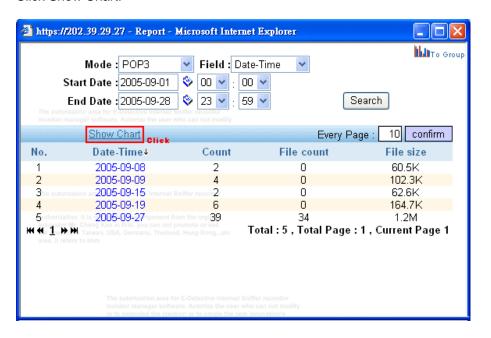
Conditional Reports (Single Report

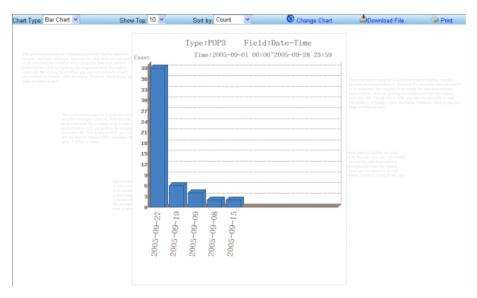
Step 1 Identify the period that the specific category (protocol) to be displayed in the report. Category: POP3, SMTP, FTP, P2P, MSN, ICQ, YAHOO, HTTP Link, HTTP Content, WEBMAIL-R, WEBMAIL-S, TELNET etc.





Step 2 Click Show Chart.





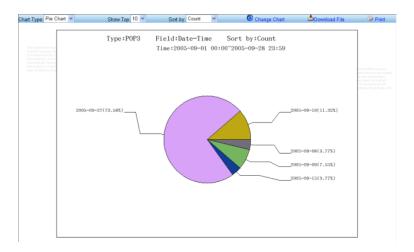


Chart Type:

Bar Chart Pie Chart

Show Top: Select to display the first 10, 20, 30 data row.

Sort by:

Count: total data.

File count: all included attached file data. File size: all included attached file size.

Change Chart

Select Chart Type, Show Top, Sort by. Clip Change Chart then can display you the type you would like to display.

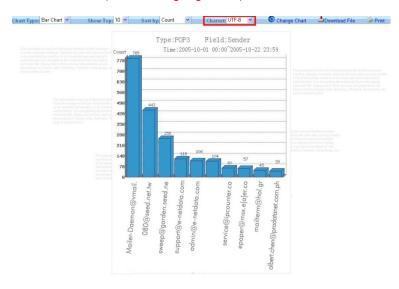
Download File

The report can be downloaded in chart figure (.png) format.

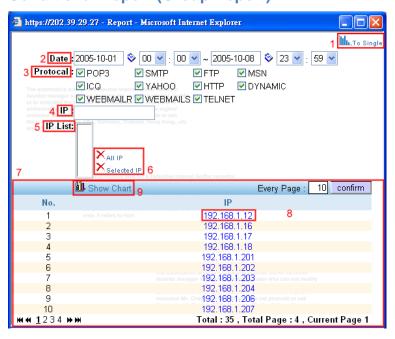
Print

The report can be printed.

Note: Because the charset of sender and receiver of POP3, SMTP, Web Mail, and the user handle and participant of YAHOO is not saved by Unicode. When showing the chart, you can choose the correct charset (unicode, big5, gb2312).

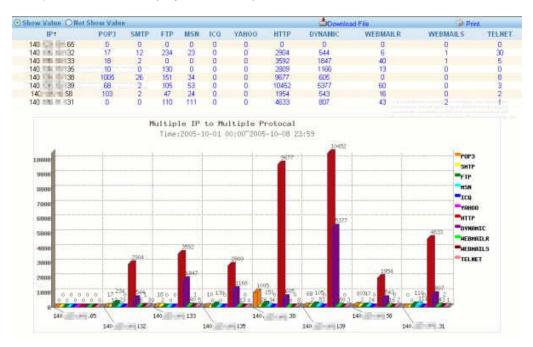


Conditional Report (Group Report)



After select the Group Report, it will display the Group Report List (see above diagram)

- 1) To Single: Select the icon to link to Single Report.
- 2) Date: Date and time setting.
- 3) Protocol/Category: Selection or Protocol/Category of different Internet applications such as POP3, SMTP, FTP, MSN etc.
- 4) IP: Key in IP address manually.
- 5) IP List: Administrator can select the IP addresses based on the List of IP displayed.
- 6) Delete All/Delete Selected: Administrator can delete all IPs or just the selected IPs.
- 7) The record IP List that have Listed in the present ICI system
- 8) By using the mouse to select any IP, it can be added the IP to the new IP List, the maximum can be selected 10 IP.
- 9) Show Chart: Display the chart report.



Network Services Usage Report

It shows the number and percentages of different services (protocols) usage on the network. By clicking on the service on the pie chart, it will link to List out all the related service as shown below.

Network Services Usage Report POP3:3,28% MSN:23,56% HTTPPAGE:67,68% Network Services Usage Weekly Report

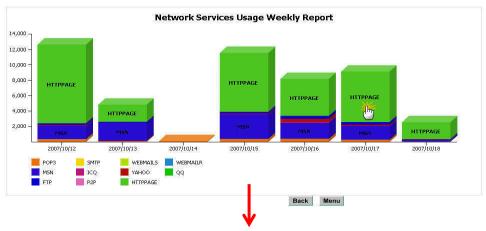
Back

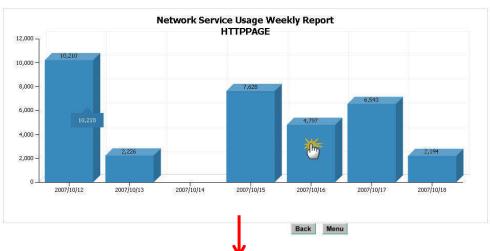


Menu

Network Services Usage Weekly Report

It shows the weekly (last 7 days) different network services count. By clicking on particular service such as HTTP Page, it will direct you to the bar chart of HTTP Page report for last 7 days. By clicking on the specific day bar chart for HTTP Page, it will List out the entire HTTP Page (URL) visited by the network users.





🏈 нт	TP Con	tent 🛣 Delete 🔍 Sea	ırch	Show Mode: 💿 IP 🔘 PC Name Every Page:	10 Confirm
No.		Date-Time↓	IP	HTTP Content	Account
1.		2007-10-17 23:50:28	192.168.1.237	₩ww.google.com	
2.		2007-10-17 23:50:25	192,168,1,237	₩ww.google.com	
3.		2007-10-17 23:50:24	192,168,1.37	pagead2.googlesyndication.com	
4.		2007-10-17 23:50:23	192.168,1.237	₩ www.google.com	
5.		2007-10-17 23:50:22	192.168,1.37	🖭 pagead2.googlesyndication.com	
6.		2007-10-17 23:50:22	192.168.1.237	₩ www.google.com	
7.		2007-10-17 23:50:22	192.168.1.37	emuch.net	
8.		2007-10-17 23:50:22	192.168.1.37	emuch.net	
9.		2007-10-17 23:50:21	192.168.1.237	₩ww.google.com	
10.		2007-10-17 23:50:21	192,168,1,237	₩ww.google.com	
нн <u>1</u>	2345	6789 » »		Total 5,688 Total Page 569 C	urrent Page 1

Top Websites Report

It shows the top web sites visited by users on the network. By clicking on the TOP 10 of each Listed URL, it will direct to the page which shows the IP List that visited the website (URL) most often. From there, admin can click on Relations, Daily Usage or Weekly Usage Report as shown in diagrams below.

	Web Server URL	Count	User
1	yahoo.overture.com	33	TOP 10
2	scdown.qq.com	26	TC 10
3	lkasoo,bahamut.com	25	TOP 10
4	forum.gamer.com	16	TOP 10
5	yahoo.com	16	TOP 10
6	news.yahoo.com	15	TOP 10

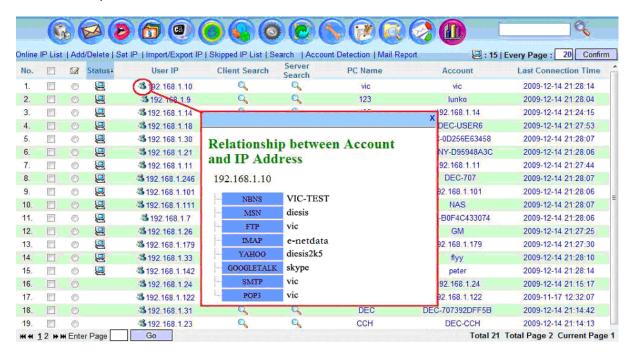


Online Users Report

It shows the Online IP List and Account with throughput statistics.



Click on the icon beside the User IP, it will show you the relationship of this IP with the accounts or usernames captured from different services.

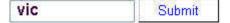


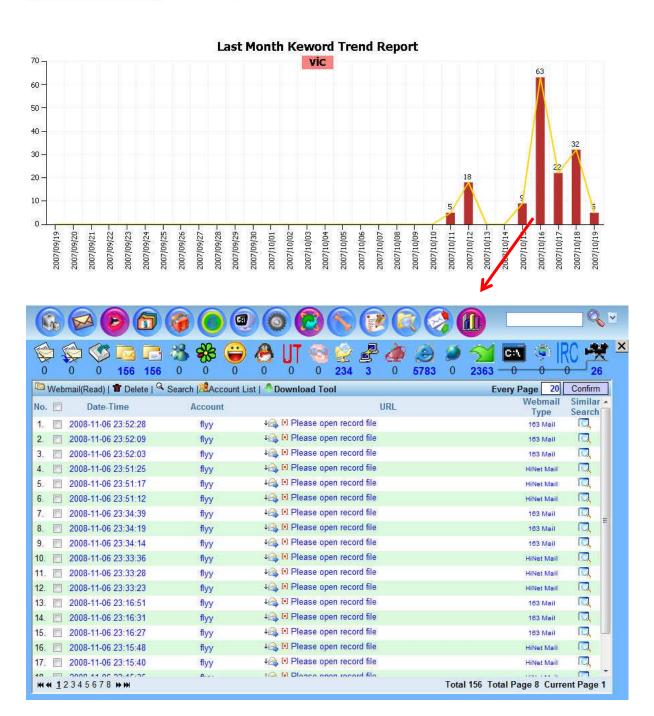
Click on search client will provide you all the data reconstructed for the particular client or IP Address.



Last Month Key Word Trend Report

Admin can search particular keyword on the database and the report can display the number of time (count) the keyword appears daily for the last one month. For example, by key in the keywords "vic" and search for it in database. The report obtained is as follow.





Daily Report (Excel Log Report)

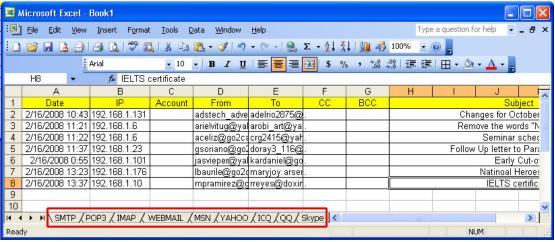
This function allows Administrator to schedule report generation in Excel format. The Daily Report can be configured to be sent to the Administrator every day at specific time. Click on Start at the Status and fill the information such as receiver, subject, content, send time and click [OK] to activate this service.



Download Daily Report

Administrator can download the daily report (in excel format) manually.





Appendix A: P2P Supported

Bittorrent Protocol	BitCometdz	uTorrent	BitSpirit
BitTornado	BitLord	BitBuddy	Flashget 1.81
Azureus	BitTorrent	BitTyrant	ezpeer+
Gnutella Protocol	Foxy	LimeWare	BearShare
eDonkey/eMule	eDonkey	eMule	Fasttrack Protocol
Kazaa			

Appendix B: Online Games Supported

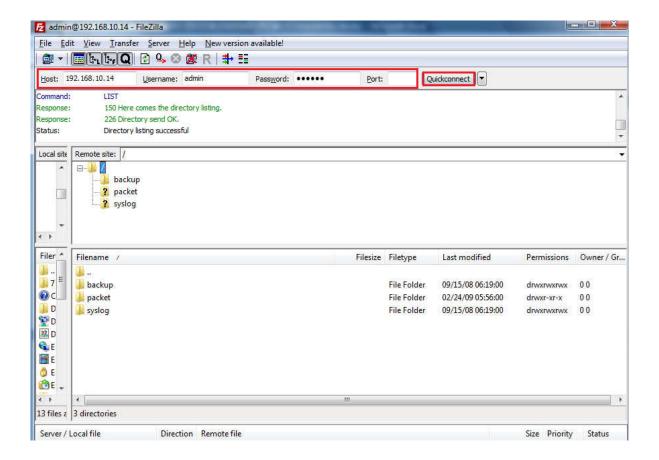
Maplestory	HE	Nobol	Metin
Kartrider	ZU	FDO	MS
BnB	Cabala	GHOSTSOUL	SUN
Mabinogi	JY1	AL	Stoneage
Hotdance	JY2	CPW	A3
Getamped	WonderLand	GVO	Hero
GrandChase	SA	CG	НВ
Pangya	TS	DOMO	Mystina
Heatproject	LoveBox	ВО	ZT
DTG	SANGO	SWDOL	FairyLand
Superrich	Dekaron	DOMOFREE	King of king 2
OO2jam	wow	RICHOL	WE5
Seal	Cabal	RO	FongShen
COCOCAN	Rohan	Mir3	FongShen2
Nage	1003b	JX	Q3baby
Gersang	9D	JX2	FongShen2
Laghaim	EverQuestll	ттн	Q3baby
Hot	Nostale	RF Online	SHE
3P	Flyff	SOL	Megaten
SF	Silkroad2	Elysium	12q
Noritel			

Appendix C: Retrieve Data Log via FTP

System admin can retrieve the ICI system data log via ftp. Please make sure that you have configured the FTP/Console Username and Password, also make sure that you have started the FTP service at Services section

Login Name: admin

Password: 000000 (six zero)



Appendix D: Field Definition of Full-Text Search Function

Full-Text Search function not only supports the keyword search but also supports data search by the specified fields of record. For example, if I want to query the sent mail records from rick@Level1.com on 2008/09/16, I can give a query statement as below:

type:SMTP AND date:20080916 AND from:rick@Level1.com

The wild card searching is also supported in Full-Text Search Function. For example, if I want to get all the mail records sent from 'rick', I can give a query statement as below:

type:SMTP AND from:rick*

The detail document of supported query syntax is Listed in the extension chapter. What kinds of fields searching you can apply for each decoding record are defined as below:

[SMTP Mail Sending] (type:SMTP)

account - The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 subject - Mail subject

from - Sender to - Recipients

cc - Carbon copy

bcc - Blind carbon copy

ext - File name extension. Ex. doc, txt, exe, ...

[POP3 Mail Retrieving] (type:POP3)

account - The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 subject - Mail subject

from - Sender

to - Recipients

cc - Carbon copy

bcc - Blind carbon copy

ext - File name extension. Ex. doc, txt, exe, ... login - Mail server login account

[IMAP Mail Retrieving] (type:IMAP)

account - The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 subject - Mail subject

from - Sender to - Recipients

cc - Carbon copy

bcc - Blind carbon copy

ext - File name extension. Ex. doc, txt, exe, ... login- Mail server login account

[Web Mail Sending] (type:WEBMAILS)

account- The target account of record srclp - Source IP address of record mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 subject- Mail subject

from- Sender to - Recipients

cc - Carbon copy

bcc - Blind carbon copy

service - Webmail service. Ex. YAHOO, GMAIL, HINET, ...

[Web Mail Retrieving] (type:WEBMAILR)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 subject- Mail subject from- Sender

to-Recipients

cc- Carbon copy

bcc - Blind carbon copy

service- Webmail service. Ex. YAHOO, GMAIL, HINET, ...

[MSN Messenger] (type:MSN)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date- Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 msnOwner- Initiator of message communication msnWhom- Participant of message communication

[ICQ] (type:ICQ)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 icqOwner - Initiator of message communication icqWhom - Participant of message communication

[Yahoo Messenger] (type:YAHOO)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 yahooOwner- Initiator of message communication yahooWhom- Participant of message communication

[QQ] (type:QQ)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916

time - Syntax format is 'HHMMSS'. Ex. 231020 qqOwner - Initiator of message communication qqWhom - Participant of message communication

[SKYPE] (type:SKYPE)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020

[UT Webchat] (type:UT)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 utOwner - Initiator of message communication utWhom - Participant of message communication

[IRC Messenger] (type:IRC)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 ircOwner - Initiator of message communication ircWhom - Participant of message communication

[Google Talk Messenger] (type:GOOGLETALK)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020 googletalkOwner- Initiator of message communication googletalkWhom- Participant of message communication

[HTTP URL Record] (type:HTTPLOG)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020

host - Web Site hostname. Ex. www.google.com.tw

[Web Page Record] (type:HTTPPAGE)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020

host - Web Site hostname. Ex. www.google.com.tw

[HTTP File Download/Upload] (type:HTTPFILE)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020

host - Web Site hostname. Ex. www.google.com.tw filename - Transferred file name. Ex. test.doc

ext- File name extension. Ex. doc, txt, exe, ...

[HTTP Video Clip] (type:HTTPVIDEO)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 231020

host - Web Site hostname. Ex. www.google.com.tw filename - Transferred file name. Ex. test.doc

ext- File name extension. Ex. doc, txt, exe, ...

[FTP File Transfer] (type:FTP)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 23102

server- FTP Server IP Address user - FTP login account

filename - Transferred file name. Ex. test.doc ext- File name extension. Ex. doc, txt, exe, ...

[P2P File Transfer] (type:P2P)

account- The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 23102

tool - P2P toolkit. Ex. BitTorrent, Foxy, ...

ext- File name extension. Ex. doc, txt, exe, ...

[On-line GAME Record] (type:GAME)

account - The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 23102

tool - Name of on-line game. Ex. WOW, ...

[Telnet Communication] (type:TELNET)

account - The target account of record srclp - Source IP address of record

mac - Source MAC address of record

date - Syntax format is 'YYYYMMDD'. Ex. 20080916 time - Syntax format is 'HHMMSS'. Ex. 23102

server- Telnet Server IP Address user - Telnet login account

Extension – Query Syntax Definition

Overview

This page provides the Query syntax in ICI Inner Search Engine. Before choosing to use the provided Query, please consider the following:

- 1. If you are programmatically generating a query string and then parsing it with the query parser then you should seriously consider building your queries directly with the query API. In other words, the query parser is designed for human-entered text, not for program-generated text.
- 2. Untokenized fields are best added directly to queries, and not through the query parser. If a field's values are generated programmatically by the application, then so should query clauses for this field. An analyzer, which the query parser uses, is designed to convert human-entered text to terms. Program-generated values, like dates, keywords, etc., should be consistently program-generated.
- 3. In a query form, fields which are general text should use the query parser. All others, such as date ranges, keywords, etc. are better added directly through the query API. A field with a limit set of values, that can be specified with a pull-down menu should not be added to a query string which is subsequently parsed, but rather added as a TermQuery clause.

Terms

A query is broken up into terms and operators. There are two types of terms: Single Terms and Phrases.

A Single Term is a single word such as "test" or "hello".

A Phrase is a group of words surrounded by double guotes such as "hello dolly".

Multiple terms can be combined together with Boolean operators to form a more complex query (see below).

Note: The analyzer used to create the index will be used on the terms and phrases in the query string. So it is important to choose an analyzer that will not interfere with the terms used in the query string.

Fields

Inner Search Engine supports fielded data. When performing a search you can either specify a field, or use the default field. The field names and default field is implementation specific.

You can search any field by typing the field name followed by a colon ":" and then the term you are looking for.

As an example, let's assume an Inner Search Engine index contains two fields, title and text and text is the default field. If you want to find the document entitled "The Right Way" which contains the text "don't go this way", you can enter:

title:"The Right Way" AND text:go

title:"Do it right" AND right

Since text is the default field, the field indicator is not required.

Note: The field is only valid for the term that it directly precedes, so the query

title:Do it right

Will only find "Do" in the title field. It will find "it" and "right" in the default field (in this case the text field).

Term Modifiers

Inner Search Engine supports modifying query terms to provide a wide range of searching options.

Wildcard Searches

Inner Search Engine supports single and multiple character wildcard searches. To perform a single character wildcard search use the "?" symbol. To perform a multiple character wildcard search use the "*" symbol.

The single character wildcard search looks for terms that match that with the single character replaced. For example, to search for "text" or "test" you can use the search:

te?t

Multiple character wildcard searches looks for 0 or more characters. For example, to search for test, tests or tester, you can use the search:

test*

You can also use the wildcard searches in the middle of a term.

te*t

Note: You cannot use a * or ? symbol as the first character of a search.

Fuzzy Searches

Inner Search Engine supports fuzzy searches based on the Levenshtein Distance, or Edit Distance algorithm. To do a fuzzy search use the tilde, "~", symbol at the end of a Single word Term. For example to search for a term similar in spelling to "roam" use the fuzzy search:

roam~

This search will find terms like foam and roams.

Starting with ICI Inner Search Engine 1.9 an additional (optional) parameter can specify the required similarity. The value is between 0 and 1, with a value closer to 1 only terms with a higher similarity will be matched. For example:

roam~0.8

The default that is used if the parameter is not given is 0.5.

Proximity Searches

Inner Search Engine supports finding words are within a specific distance away. To do a proximity search use the tilde, "~", symbol at the end of a Phrase. For example to search for "apache" and "jakarta" within 10 words of each other in a document use the search:

"jakarta apache"~10

Range Searches

Range Queries allow one to match documents whose field(s) values are between the lower and upper bound specified by the Range Query. Range Queries can be inclusive or exclusive of the upper and lower bounds. Sorting is done lexicographically.

mod_date:[20020101 TO 20030101]

This will find documents whose mod_date fields have values between 20020101 and 20030101, inclusive. Note that Range Queries are not reserved for date fields. You could also use range queries with non-date fields:

title:{Aida TO Carmen}

This will find all documents whose titles are between Aida and Carmen, but not including Aida and Carmen.

Inclusive range queries are denoted by square brackets. Exclusive range queries are denoted by curly brackets.

Boosting a Term

Inner Search Engine provides the relevance level of matching documents based on the terms found. To boost a term use the caret, "^", symbol with a boost factor (a number) at the end of the term you are searching. The higher the boost factor, the more relevant the term will be.

Boosting allows you to control the relevance of a document by boosting its term. For example, if you are searching for

jakarta apache

and you want the term "jakarta" to be more relevant boost it using the ^ symbol along with the boost factor next to the term. You would type:

jakarta^4 apache

This will make documents with the term jakarta appear more relevant. You can also boost Phrase Terms as in the example:

"jakarta apache"^4 "Apache ICI Inner Search Engine"

By default, the boost factor is 1. Although the boost factor must be positive, it can be less than 1 (e.g. 0.2)

Boolean Operators

Boolean operators allow terms to be combined through logic operators. ICI Inner Search Engine supports AND, "+", OR, NOT and "-" as Boolean operators(Note: Boolean operators must be ALL CAPS).

The OR operator is the default conjunction operator. This means that if there is no Boolean operator between two terms, the OR operator is used. The OR operator links two terms and finds a matching document if either of the terms exist in a document. This is equivalent to a union using sets. The symbol || can be used in place of the word OR.

To search for documents that contain either "jakarta apache" or just "jakarta" use the query:

"jakarta apache" jakarta

or

"jakarta apache" OR jakarta

AND

The AND operator matches documents where both terms exist anywhere in the text of a single document. This is equivalent to an intersection using sets. The symbol && can be used in place of the word AND.

To search for documents that contain "jakarta apache" and "Apache ICI Inner Search Engine" use the query:

"jakarta apache" AND "Apache ICI Inner Search Engine"

+

The "+" or required operator requires that the term after the "+" symbol exist somewhere in a the field of a single document.

To search for documents that must contain "jakarta" and may contain "ICI Inner Search Engine" use the query:

+jakarta apache

NOT

The NOT operator excludes documents that contain the term after NOT. This is equivalent to a difference using sets. The symbol! can be used in place of the word NOT.

To search for documents that contain "jakarta apache" but not "Apache ICI Inner Search Engine" use the query:

"jakarta apache" NOT "Apache ICI Inner Search Engine"

Note: The NOT operator cannot be used with just one term. For example, the following search will return no results:

NOT "jakarta apache"

The "-" or prohibit operator excludes documents that contain the term after the "-" symbol. To search for documents that contain "jakarta apache" but not "Apache ICI Inner Search Engine" use the query:

"jakarta apache" - "Apache ICI Inner Search Engine"

Grouping

Inner Search Engine supports using parentheses to group clauses to form sub queries. This can be very useful if you want to control the boolean logic for a query.

To search for either "jakarta" or "apache" and "website" use the query:

(jakarta OR apache) AND website

This eliminates any confusion and makes sure you that website must exist and either term jakarta or apache may exist.

Field Grouping

Inner Search Engine supports using parentheses to group multiple clauses to a single field.

To search for a title that contains both the word "return" and the phrase "pink panther" use the query:

title:(+return +"pink panther")

Escaping Special Characters

Inner Search Engine supports escaping special characters that are part of the query syntax. The current List special characters are

```
+-&& ||!(){}[]^"~*?:\
```

To escape these character use the \ before the character. For example to search for (1+1):2 use the query:

1(11+11)1:2

Technical Support Email:

support@level1.com

