

# Network Box Office Customer Portal User Guide

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# Welcome

## The Network Box Office Customer Portal

While our customers' organisational structures may be centralised, distributed or individualised (and any combination of the three), Network Box has always been concerned with the global view. Our support offices and Network Operations Centres are geographically distributed around the world; but all provide feedback to a centralised system known as Outbreak.

The Network Box Outbreak system currently handles approximately 60,000 security events a minute (about 1,000 each second - more than 86 million a day). A large computer system (nicknamedWOPR) summarises and correlates all those events in real-time; identifying trends and alerting our security engineers to changes in the global threat landscape. The Outbreak system is just one of our internal systems that we rely on day-to-day to keep our customers secure. Other internal systems include:

- Global Monitoring System (NBGMS) - a global network of monitoring stations testing, recording and alerting on hundreds of health metrics for each Network Box and Internet gateway.
- Inventory - the system which records which customers own which boxes, resold through which channel partner.
- Licensing - recording the contractual, licensing and SLA arrangements between Network Box, our partners, and customers.
- Deployment - tracking the deployment of new Network Box installations.
- Ticketing - tracking customer and NOC initiated issues and ensuring we meet our SLA targets.
- Workload Statistics - a part of the Outbreak system, this tracks the workload that Network Box devices are handling (to ensure availability and be pro-active in ensuring sufficient capacity for traffic peaks).

The Network Box Office Customer Portal gives our customers a window into these systems. It provides real-time status of Network Box devices under our management, and allows for formalised two-way communication with the Network Box Network Operation Centres (NOCs) responsible for monitoring and configuration of the equipment and network.

## Key Functionality

The Network Box Office Customer Portal provides the following key functionality:

- An overview page showing a map of boxes, VPN and management links against a geographic background. This provides a single overview of the managed network. The map is customisable and can show boxes, Internet reachability and VPN links. Pop-up displays allow the user to summarise device status, and hot-links are provided for connection to other parts of the system.
- A ticketing module showing customer/NOC initiated tickets and their status. This forms the primary communications channel between the customer and the NOC (as it provides for formalised issue tracking, SLA conformance, and authenticated access control to change and configuration requests) This module also includes:
  - A deployment survey module for tracking the information requirements stage of deployments (including gathering the information necessary for deployment, using online collaborative tools).
- An inventory module showing box ownership and status. This module also includes:
  - A health module; interfaced to the Network Box Global Monitoring System (GMS), to show box, gateway and VPN link health status.
  - A licensing module; showing the SLA agreements and contractual arrangements.
  - A workload statistics module; showing box workload and trend analysis.
- A user management module; permitting designated customer administrators to view and maintain Box Office user accounts themselves (without requiring NOC involvement). This module permits the customer greater control of management of the team supporting global deployments.

The system provides a single, simple, powerful web-based user interface for the management of one or more Network Boxes - at the country, regional and global levels.

This guide is intended to document this system, from the customer and reseller administrator point of view.

# Logging In and Out

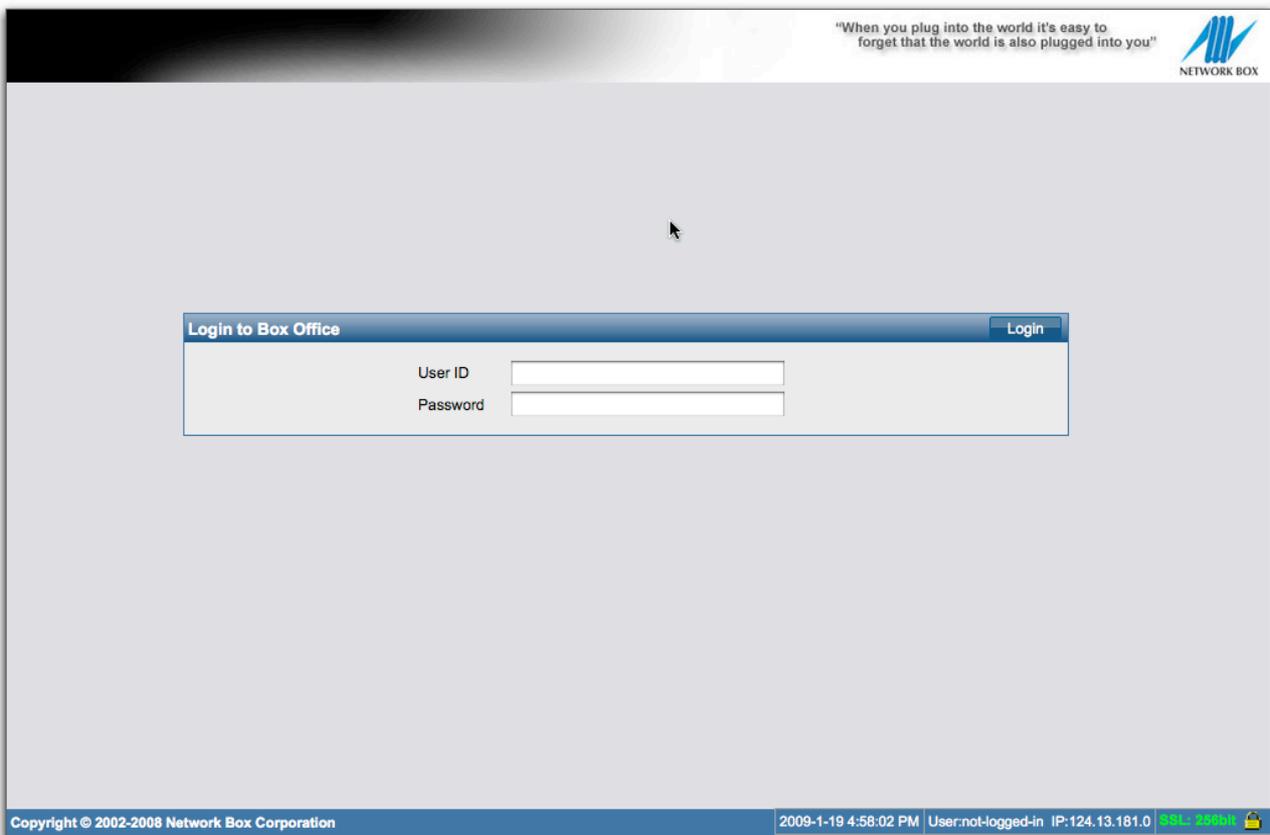
## Accessing Network Box Office

The Network Box Office system is accessed via an industry standards compliant web browser, over the public Internet. We currently recommend that you use one of the following browsers:

- Microsoft Internet Explorer (v7 or later)
- Firefox (v3 or later)
- Apple Safari (v3.2 or later)
- Google Chrome

You should ensure that you have both Cookies and JavaScript enabled on your web browser, to take advantage of all the functionality that the site has to offer. Without this, you may not be able to login or use some parts of the system. We also recommend a screen size of 1024x768 or greater.

The URL to use is: <https://boxoffice.network-box.com/> and this will result in the following login prompt:



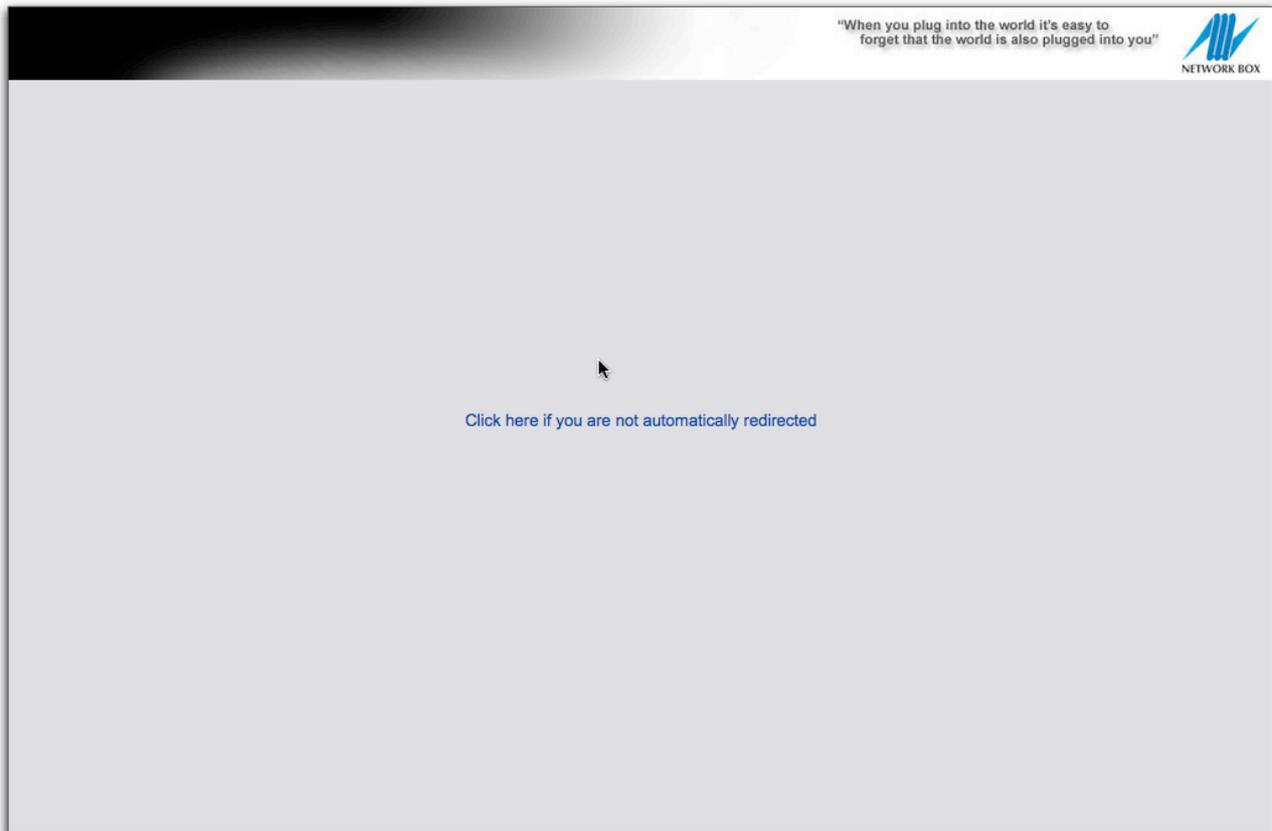
## Logging In

Every user of Network Box Office must have an assigned userid and password. The userid is normally of the form “company.firstname.lastname”. You should have been given this initial username and password by your NOC when you first deployed a Network Box, and you should contact your NOC if you have lost it.

After entering your userid and password, click the “Login” button to proceed with logging in.

## Regional Mirrors

After validating your userid and password, the system will automatically take you to your assigned Box Office mirror. You will see a message as below:



Currently, Network Box operates mirrors in Asia Pacific, Europe and the Americas. The direct URLs for these are:

- <https://ap.boxoffice.network-box.com/>
- <https://eu.boxoffice.network-box.com/>
- <https://us.boxoffice.network-box.com/>

The mirrors are arranged to provide you a geographically local access point to the system. All mirrors carry identical real-time information (synchronised in real-time, globally) and different people in your organisation can use different mirrors (but see the same information). We recommend that you select the mirror which is geographically closest to you, as that should provide you the fastest user experience.

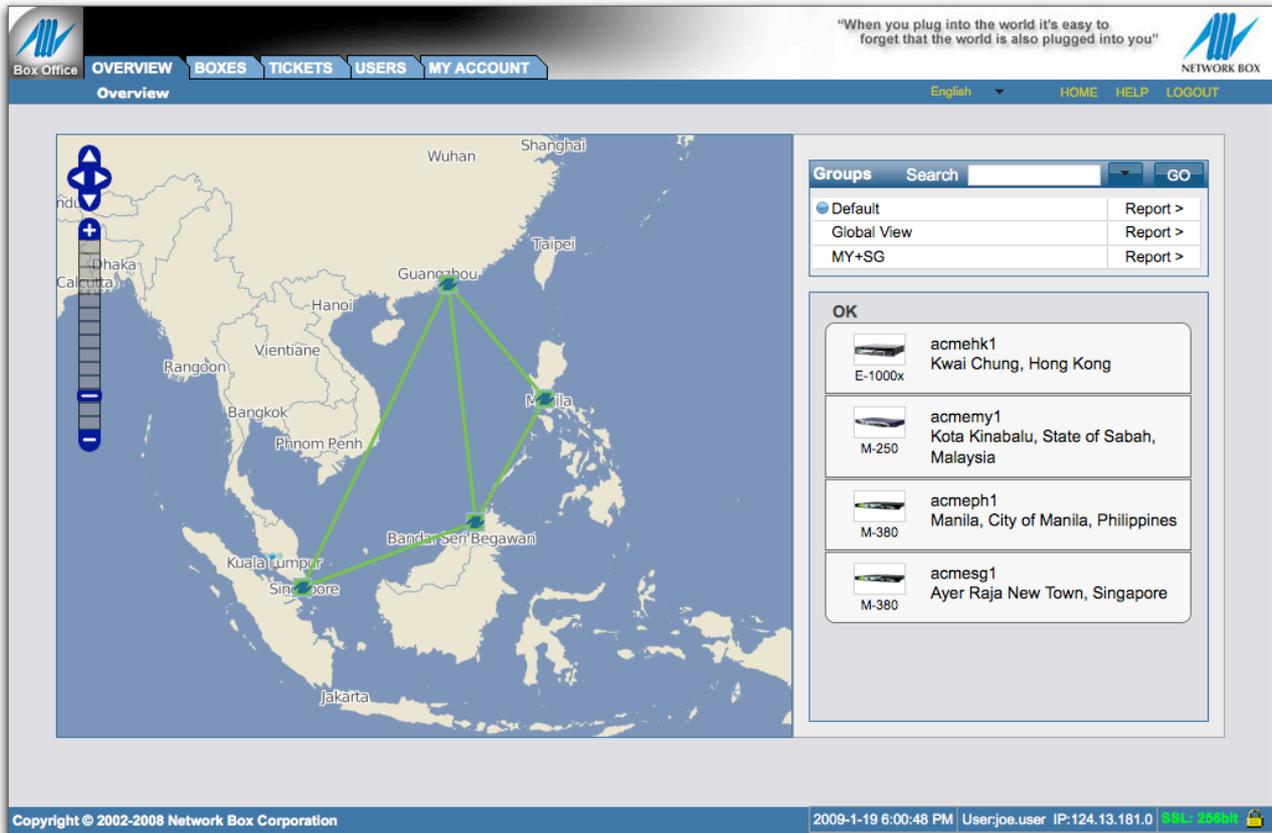
If you manually enter a mirror url (from the above list), the system will log you into that mirror (and will not redirect you to another mirror, no matter what preference you set on the MY ACCOUNT page). Alternatively, you can use the MY ACCOUNT preferences page to select your preferred mirror (which the system will automatically switch you to once you login from the main <https://boxoffice.network-box.com/> URL).

## Network Box

Should you have problems accessing a particular regional mirror, you can also manually use one of the alternates from the above list.

## Screen Layout

After successfully logging in, the system will take you to the Box Office Overview screen and present you with a geographic overview of your Network Boxes and their status.



While the overall structure of the presented web page will remain consistent, the center pane and menus will change depending on what page you visit. So, let's look at the menu, quick link and status bar sections, individually, and explain what is shown and how you use them.

## Menu Bar



The menu bar shows a row of tabs corresponding to the modules of the system that you have access to. The modules are as follows:

- The OVERVIEW module shows the geographic overview of Network Boxes and their status.
- The BOXES module shows tabular detail for box status and can be used to obtain detailed information on your Network Boxes.
- The TICKETS module is used to view, raise and respond to both Tickets and Surveys. It is your primary communications channel to the NOC.

## Network Box

- The USERS module allows authorised administrators to maintain (create, modify and delete) their own Box Office users.
- The MY ACCOUNT module is used to set personal account preferences.

The currently selected module (tab) is shown in the foreground with a dark blue colour, while other available modules are shown in the background with a lighter blue colour.

Underneath the tab, a dark blue bar shows the available menu options available. These will change depending on the module and screen currently active.

To change module, just click on the tab corresponding to the module you want. To select a menu option, click on the menu option you want.

On the right of the menu bar, you will also see some quick links to change the display language (from the drop down menu), go to the HOME page, access this manual as HELP, and LOGOUT. Any change to the display language will only be for the current login session - if you wish to permanently change your display language selection, set the preference in MY ACCOUNT module.

## Quick Link Bar



Some screens will allow you to use the Quick Link Bar. If available, this will appear in gray colour under the dark blue tab menu. An example is shown above.

The Quick Link Bar provides you fast navigation links to different linked information. For example, you can use it to quickly jump to see the Box Workload for a selected box, or switch to show the box on the map overview.

## Status Bar



The status bar shows you the current date and time (in your local time zone), your logged-in username, IP address and status of the SSL encryption used to protect the security of your web session. We recommend you check the SSL status each time you login to Network Box Office and ensure that it shows a **GREEN** colour, and closed padlock icon, to indicate that the session is strongly encrypted and authenticated. Your browser should also show this (with a padlock icon).

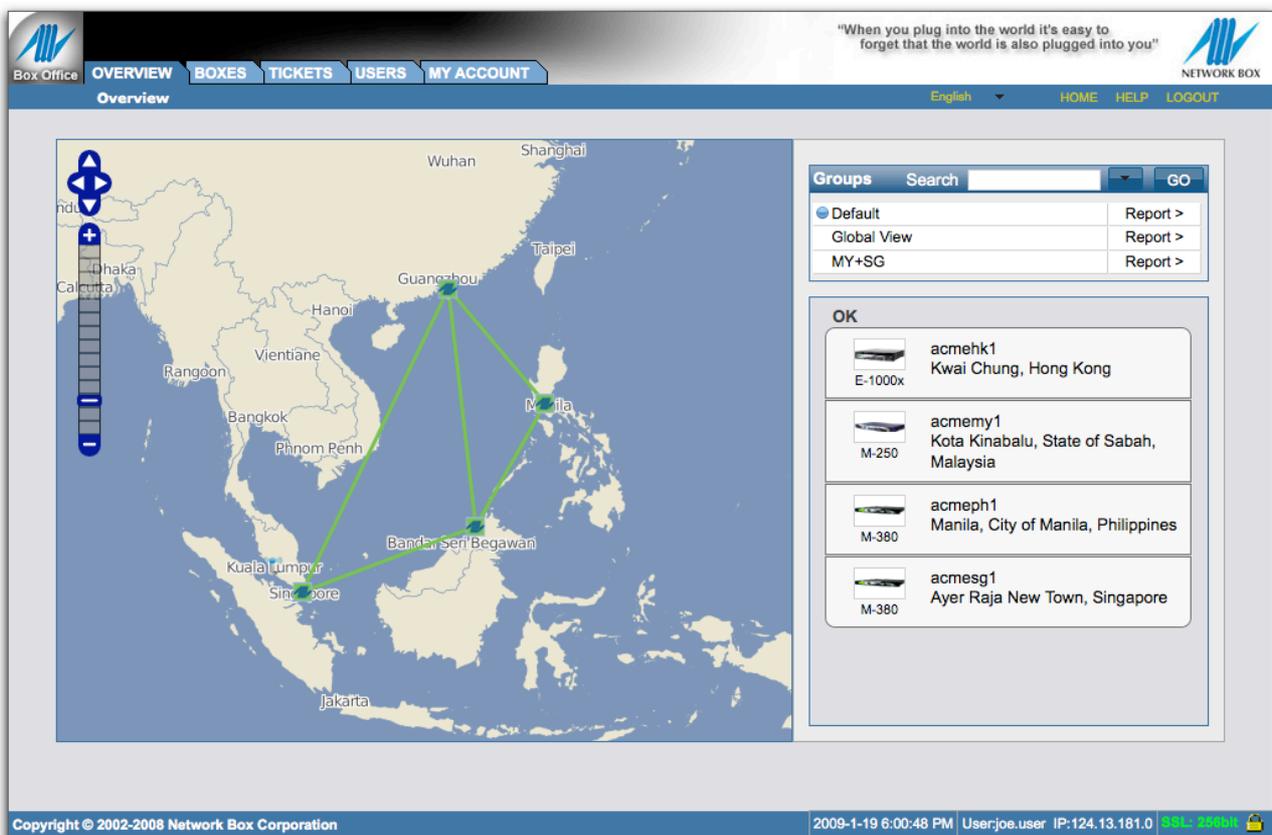
## Logging Out

To logout, click the LOGOUT link in the top right of the menu bar. You will be taken back to the login screen. For security reasons, we recommend that you logout when you have finished working with the system, and lock your workstation screen with a password whenever you leave your workstation unattended.

# OVERVIEW Module

## Anatomy of the Geographic Overview

The Geographic Overview module shows you where your boxes are in the world, as well as their current status, reachability and VPN links. It is the first screen shown when you login, and works closely in combination with the BOXES module to allow for detailed information drill-down. Let's see how the screen is arranged:



The left-hand panel shows a map of the world (or the region of it containing your boxes). Colours are used so that boxes in state ok are shown with a **GREEN** background, boxes in warning state are shown with a **YELLOW** background, and boxes in critical state are shown with a **RED** background. The same is true for VPN link status (solid lines) and Reachability status (dotted lines). There are some special keyboard and mouse controls available:

- Clicking on the UP-LEFT-RIGHT-DOWN control in the top-left will allow you to pan the map. You can also accomplish this by dragging the map with your mouse (click down on the map, and then move the mouse while holding down the mouse button).
- Clicking the + / - slider (or any division of the slider) will allow you to zoom in/out of the map. You can also zoom in by double-clicking anywhere on the map. You can zoom to a particular area of the map by holding down the SHIFT key on your keyboard and then dragging (click down and move the mouse while holding down the mouse button) the mouse.

## Network Box

- Hovering the mouse pointer over a point of interest (such as a Box, VPN or Reachability link) will pop-up a box giving you further detail (more information on this feature, below).
- Clicking on a Network Box icon will zoom-in to that box and show the detailed information on the box.
- Clicking on a VPN link will zoom-in on the two connected boxes and show the detailed information on them.

The top-right panel shows user and system defined Groups, and allows you to quickly search for a particular box to show the status of. Groups are collections of boxes that you define. The “Default” group is automatically created by the system for you and will show you a default view of your boxes (the detail shown in the default view will depend on how many boxes you have). You can define your own groups using the BOXES module, as explained in the next chapter.

You can enter a boxid into the search box to quickly zoom-in to any of your boxes. The field is auto-completing and once you’ve entered enough characters to distinguish the boxid, it will offer you a quick selection to choose from. Pressing ENTER, or clicking on one of the presented choices, will zoom-in to that box (on both the map and the bottom-right detail panel).

The current group is highlighted with a small blue dot. As well as showing the boxes of the group in the overview map, the selected boxes themselves are shown in the bottom-right panel. You can click on a box here to zoom-in to the box and show its detailed information.

Let’s now look at each of these functions in detail.

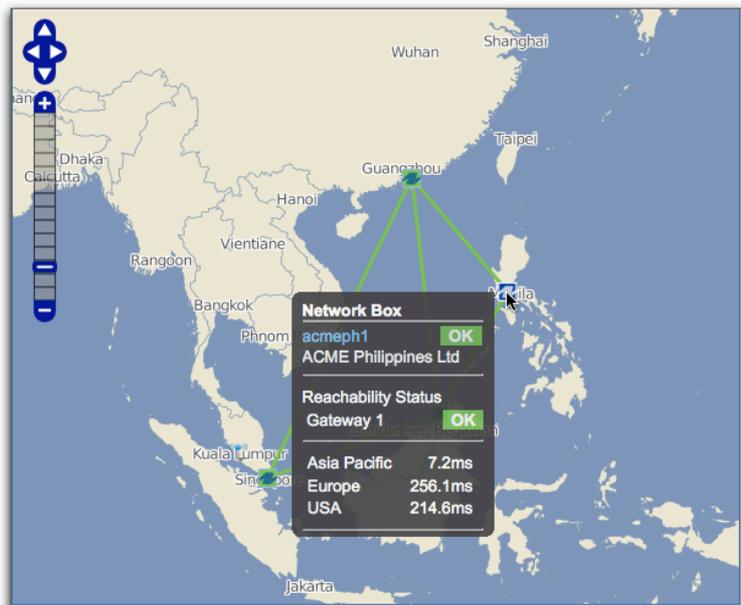
## Highlighting Points of Interest

Here we show the affect of highlighting a Network Box. The pop-up panel shows the boxid (highlighted in blue) and its health status.

The reachability<sup>1</sup> status is also shown (in this case it has one gateway and that is OK). Finally, the reachability timings to Asia Pacific, Europe and USA are shown.

The reachability timings shown are averages. If there is a problem with reachability, a **WARNING** or **CRITICAL** label will be shown.

The information shown is a summary only. To see the detailed information on the Network Box, either click on the boxid label (highlighted in blue) or the icon for the Network Box on the map itself.



The example shown has only one Internet link (one gateway). In cases where Network Boxes have multiple Internet gateways, the summary will show the average reachability of all the links while the reachability status will show individual statuses for each Internet Link. As always, you can zoom-in for more detail.

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<sup>1</sup> Reachability is the Internet connectivity of the Network Box and its gateway. The Network Box itself tests various points across the globe for round-trip-time (the time taken to send a test packet and receive a confirmation reply from the test point) and link integrity (the percentage of confirmation replies receives, or 100% - the packet loss). As well as the Network Box testing the Internet (outbound tests), we also conduct active inbound tests from various Internet test points (performing the same reachability round-trip-time and link integrity checks from the Internet to the Network Box).

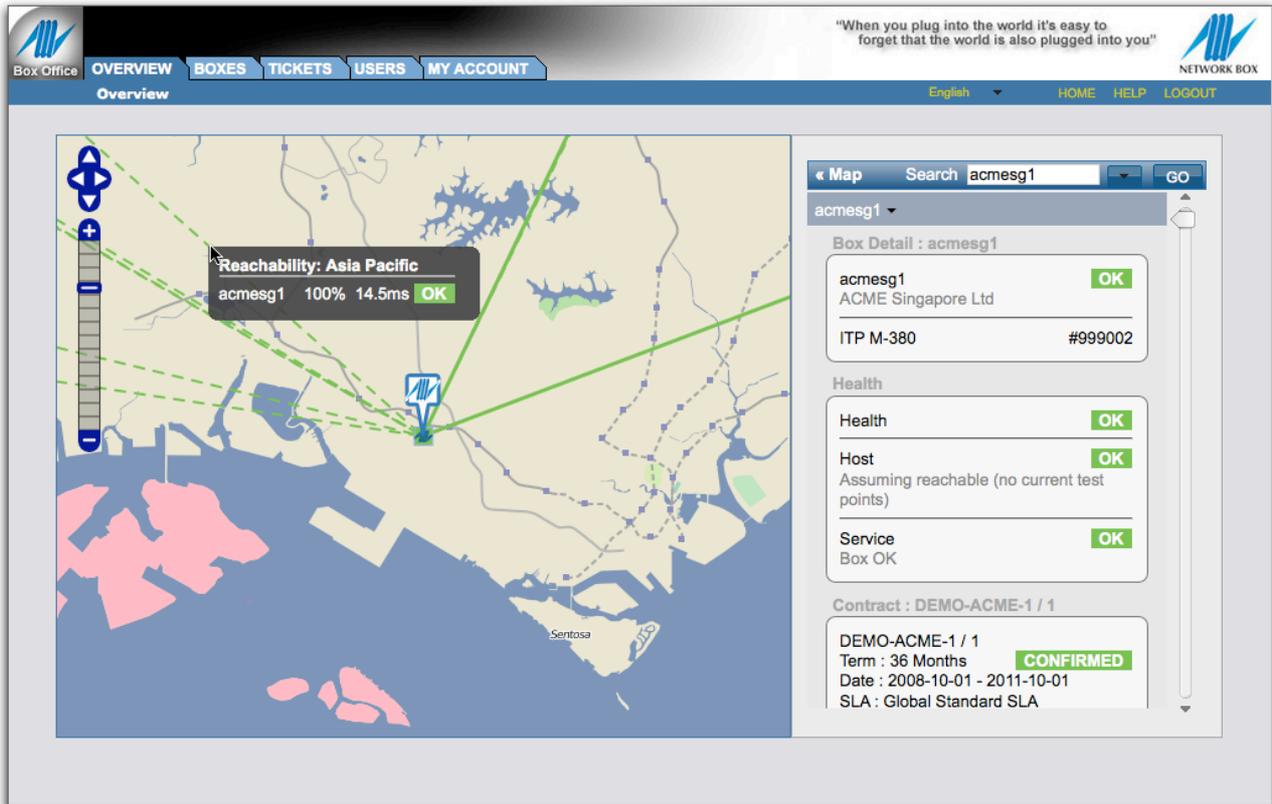
## Highlighting VPN Links

In the same way that you can highlight a Network Box icon, you can also highlight a VPN link. In this case, the system will show you the status of the VPN link and the two Network Boxes it connects.



The information shown is a summary only. To see the detailed information on the Network Boxes, and other VPN links from those boxes, click on the VPN link on the map.

## A Zoomed-in Network Box



Once you've zoomed-in on a Network Box (by either selecting it from the map, the right hand box list panel or searching for it), the display will change. The map will zoom-in to a detailed view of the box location and change to display the Network Box, its reachability tests (as dotted lines) and all VPN links to/from the Network Box (as solid lines). In this case, highlighting a reachability link will show you the detailed reachability information<sup>2</sup>.

The right-hand panel will switch to show a detailed view of the selected Network Box. This will include:

- Box ID, overall status, name, model and serial number.
- Box Health Status (including host and service health from the GMS system).
- Box Service Contract information.
- Reachability Detail for each of the reachability test points

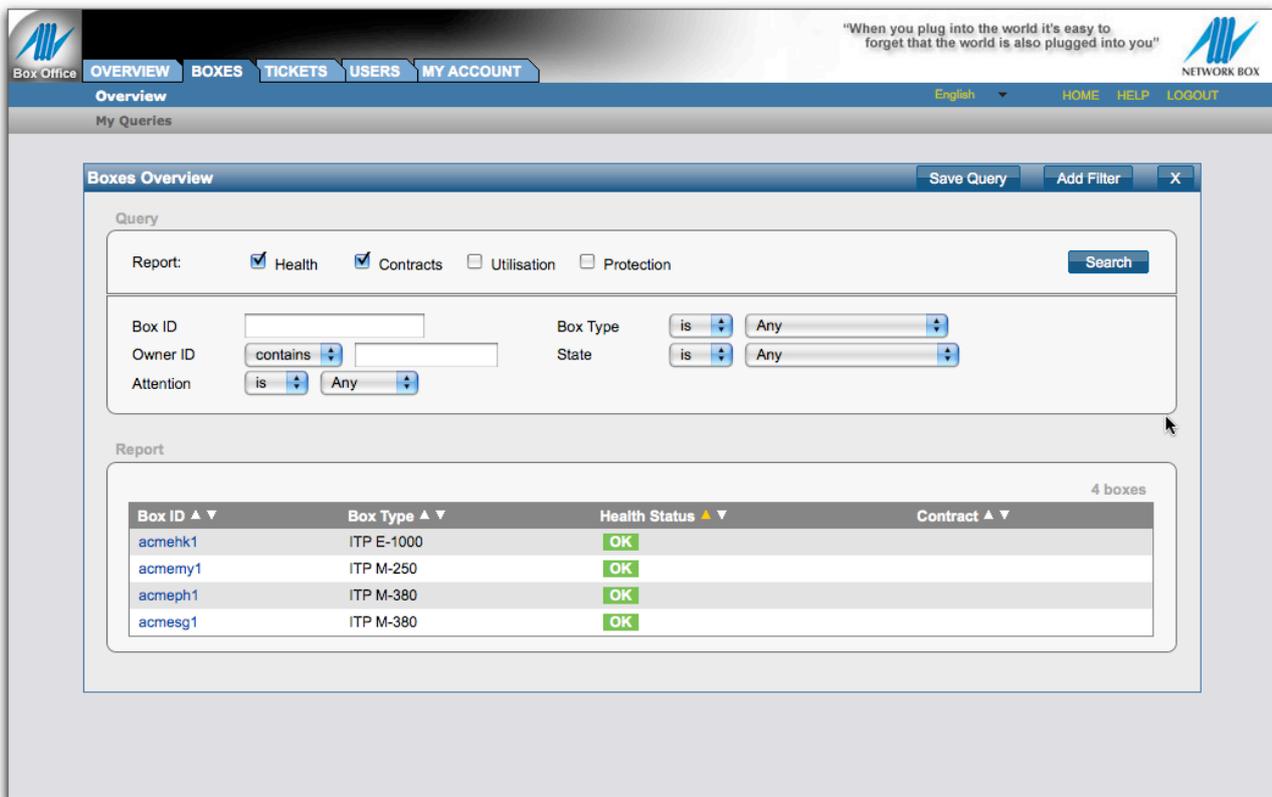
Clicking on the "< Map" link will take you back to the overview map. Clicking on any of the right-hand panel topics will take you to the BOXES module for further detail on the item of interest.

<sup>2</sup> Detailed Reachability Information includes the reachability test point name, boxid tested, link integrity, average round-trip test time, and overall reachability status of that test point to that Network Box.

# BOXES Module

## The Boxes Module

The BOXES module shows tabular detail for box status and can be used to obtain detailed information on your Network Boxes. It makes extensive use of the Quick Links bar to allow you to move between different information displays. Choosing the BOXES tab and then clicking the *Search* button will show you a summary report for all your Network Boxes.



This search screen provides powerful functionality for reporting on your Network Boxes and defining reporting groups for display on the OVERVIEW module. We'll cover it in detail later in this chapter of this user guide. For the moment, let's look at the detail for a particular Network Box. Clicking on the boxid will take us to the detailed view of that Network Box.

## Detailed Network Box View

Box Office **OVERVIEW** BOXES TICKETS USERS MY ACCOUNT

English HOME HELP LOGOUT

Box Detail Box Health Box Workload Box Contract Tickets Owner Show on Map My Queries

**Box Detail [acmemy1]**

Details

Box ID	acmemy1	Serial #	999003
Type	ITP M-250	State	Installed
Location	Malaysia		
SLA	Global Standard SLA		
Owner	ACME Malaysia Sdh Bhd		

NOC Contact [Headquarters: Demonstrations]

NOC Tel	+852 2736-2018	Sales Tel	+852 2736-2083
NOC Fax		Sales Fax	
NOC Email	<a href="mailto:hqnoc@network-box.com">hqnoc@network-box.com</a>	Sales Email	<a href="mailto:hqnoc@network-box.com">hqnoc@network-box.com</a>
Website	<a href="http://www.network-box.com/">http://www.network-box.com/</a>		

The Box Detail View shows us the box details (boxid, serial number, model, state, location, SLA and owner). It also shows us the contact information for each of the NOCs assigned to the Network Box and able to provide us support.

At this point the Quick Link Bar is visible and allows us to quickly switch to other displays, including:

- Box Detail (this display).
- Box Health (detailed health information from the GMS system).
- Box Workload (workload charts).
- Box Contracts (detailed information on active support contracts).
- Tickets (support tickets raised for the selected Network Box).
- Owner (detailed information on the owner of the selected Network Box).
- Show on map (a link back to the OVERVIEW module to zoom-in on the selected Network Box).
- My Queries (saved queries defining groups of Network Boxes for reporting purposes).

We'll now describe each of these screens in detail.

## Box Health View

**Box Health [acmemy1]**

Health (Last Change: 2009-01-19 13:16:25 GMT)

Host Status **OK**  
 Host Message Assuming reachable (no current test points)

Service Status **OK**  
 Service Message Box OK

Reachability

Host: 10.1.1.1, Gateway: 10.1.1.2 8 Reachability Records

Link ID ▲ ▼	Test Point ▲ ▼	Status ▲ ▼	RTT (ms) ▲ ▼	Integrity (%) ▲ ▼	Last Change (GMT) ▲ ▼
AP-1	Asia Pacific,Hong Kong	<b>OK</b>	5.4	100.0	2009-01-03 03:49:24
AP-2	Asia Pacific,Hong Kong	<b>OK</b>	0.8	100.0	2009-01-03 03:49:24
AP-3	Asia Pacific,Malaysia	<b>OK</b>	14.5	100.0	2009-01-19 05:33:24
EU-1	Europe,United Kingdom	<b>OK</b>	284.2	100.0	2009-01-03 03:49:24
EU-2	Europe,United Kingdom	<b>OK</b>	238.0	100.0	2009-01-03 03:49:24
EU-3	Europe,Germany	<b>OK</b>	245.1	80.0	2009-01-19 05:33:24
US-1	USA,United States	<b>OK</b>	205.8	100.0	2009-01-03 03:49:24
US-2	USA,United States	<b>OK</b>	222.4	100.0	2009-01-03 03:49:24

VPNs 2 VPNs

Link ID ▲ ▼	Dest Box ID ▲ ▼	Title ▲ ▼	Status ▲ ▼	Last Change (GMT) ▲ ▼	Remarks
MY-PH	acmeph1	SSL/C VPN Link to acmeph1	<b>OK</b>	2009-01-03 03:52:39	
MY-SG	acmesg1	SSL/C VPN Link to acmesg1	<b>OK</b>	2009-01-03 03:52:39	

The Box Health View shows detailed health information from the GMS<sup>3</sup> system. The health information is split into four areas:

- Host Health (whether the host is reachable and healthy).
- Service Health (the health of various software and hardware services on the Network Box).
- Reachability (the reachability of the Network Box and it's gateways to/from the Internet).
- VPNs (the up/down status of VPN links to/from the Network Box).

The host and service messages will attempt to give full information on the problems encountered in an easy-to-understand format. In some complex cases they will just refer to 'one or more' warnings/critical errors and you must refer to the NOC for further information on the problem.

<sup>3</sup> GMS is The Network Box Global Monitoring System. It is a global network of monitoring stations testing, recording and alerting on hundreds of health metrics for each Network Box and Internet gateway.

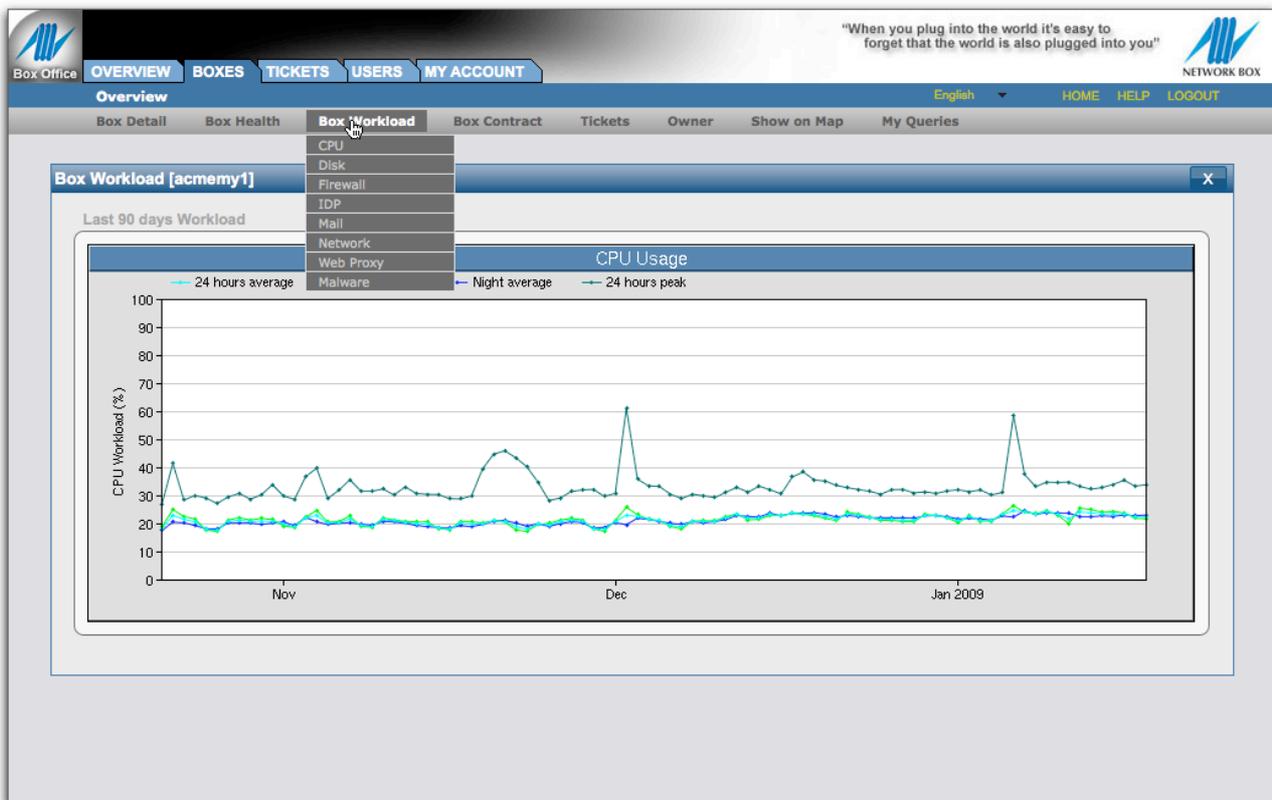
## Box Workload

There are several box workload charts available from the *Box Workload* drop-down menu on the BOXES Quick Link Bar.

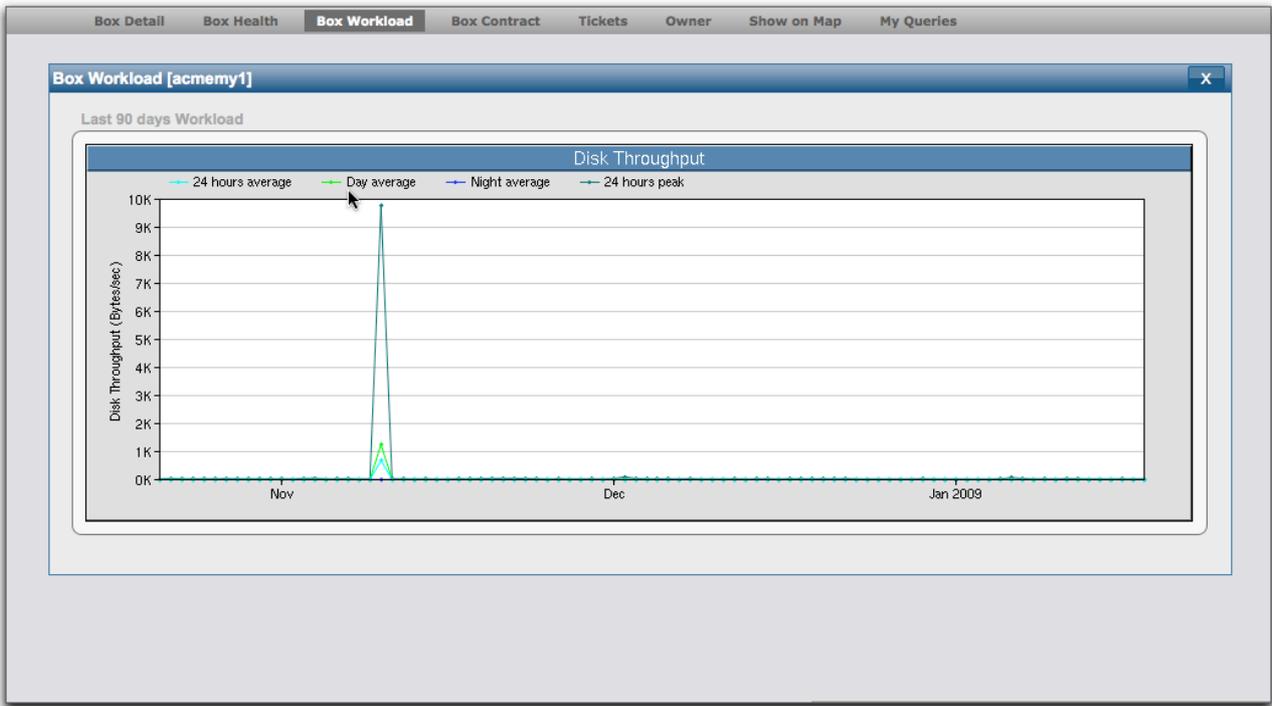
These include:

- CPU Workload
- Disk Workload
- Firewall Workload
- IDP Workload
- Mail Workload
- Network Workload
- Web Proxy Workload
- Malware Workload

Let's go through each of these in detail.



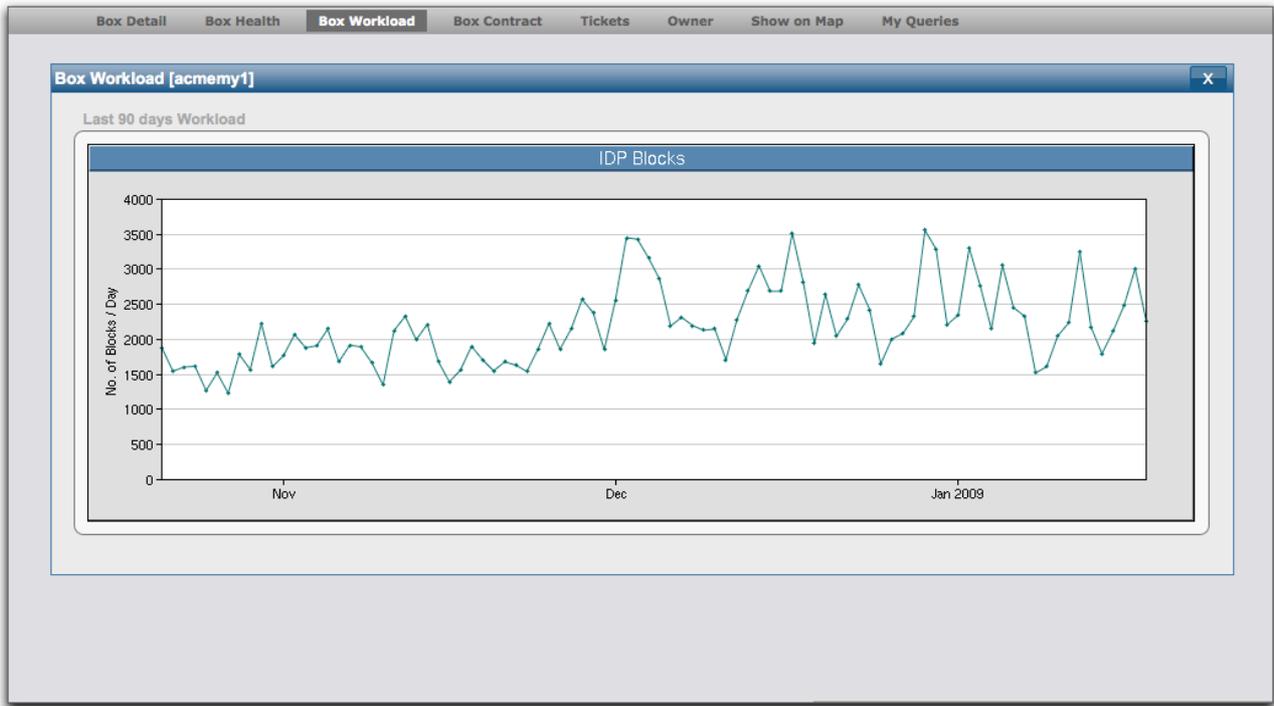
The CPU workload chart shows you the last 90 days of CPU utilisation. The chart represents overall CPU utilisation (expressed as average percentage utilised) for each of the 24 hours average, Day (8am->8pm) average, Night (8pm->8am) average and 24 hours peak.



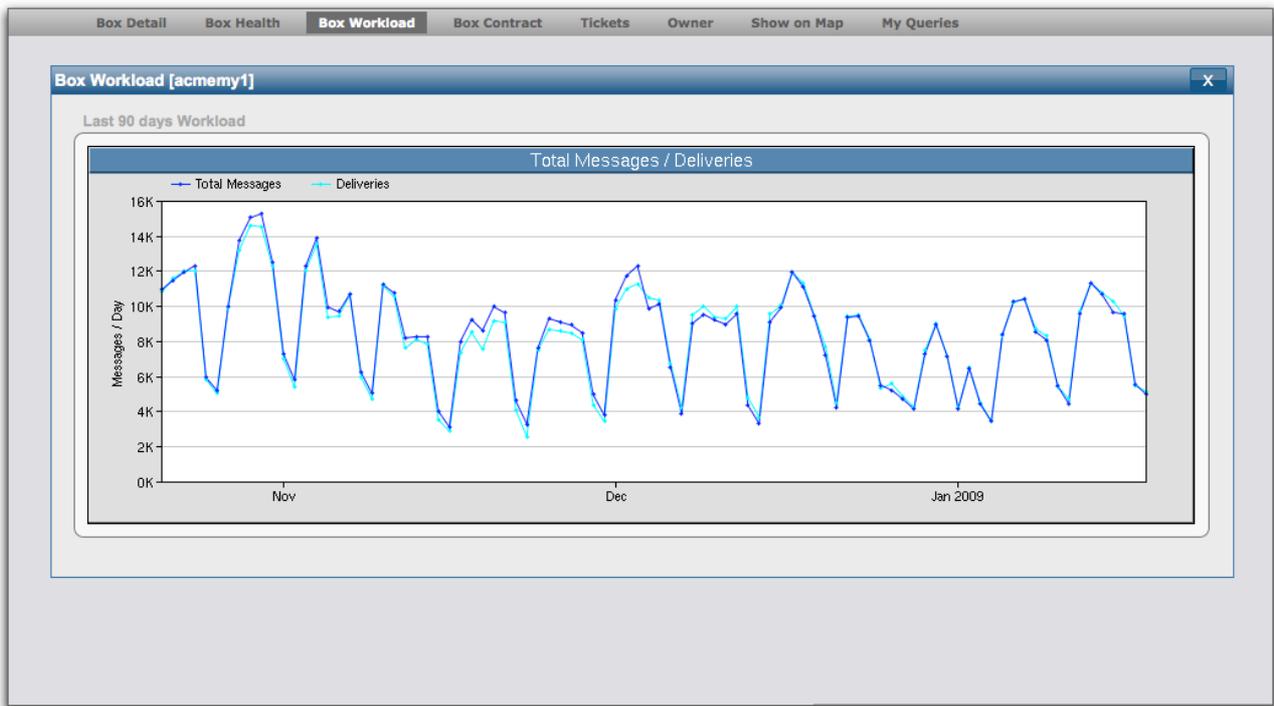
The DISK workload chart shows you the last 90 days of DISK utilisation. The chart represents overall DISK utilisation (expressed as Bytes/Second read+write) for each of the 24 hours average, Day (8am->8pm) average, Night (8pm->8am) average and 24 hours peak.



The FIREWALL workload chart shows you the last 90 days of FIREWALL blocking activity. The chart represents the number of firewall blocks enforced for each day.



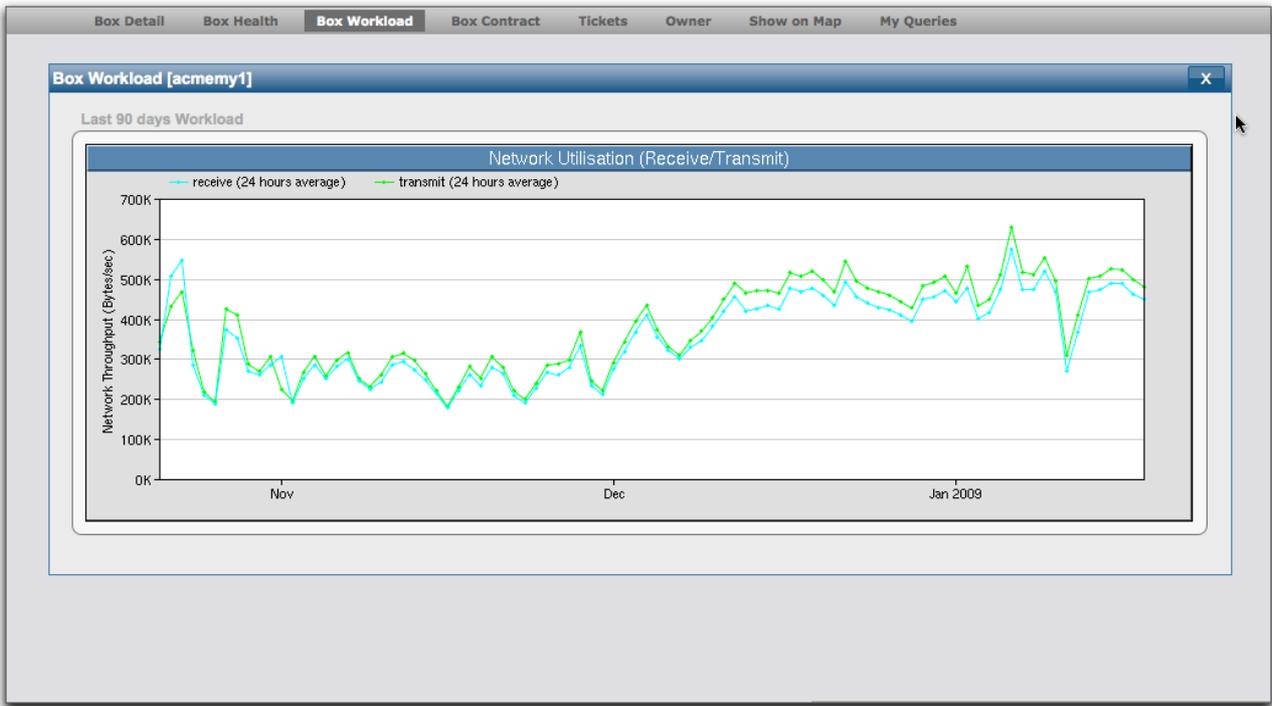
The IDP workload chart shows you the last 90 days of IDP blocking activity. The chart represents the number of IDP blocks enforced for each day.



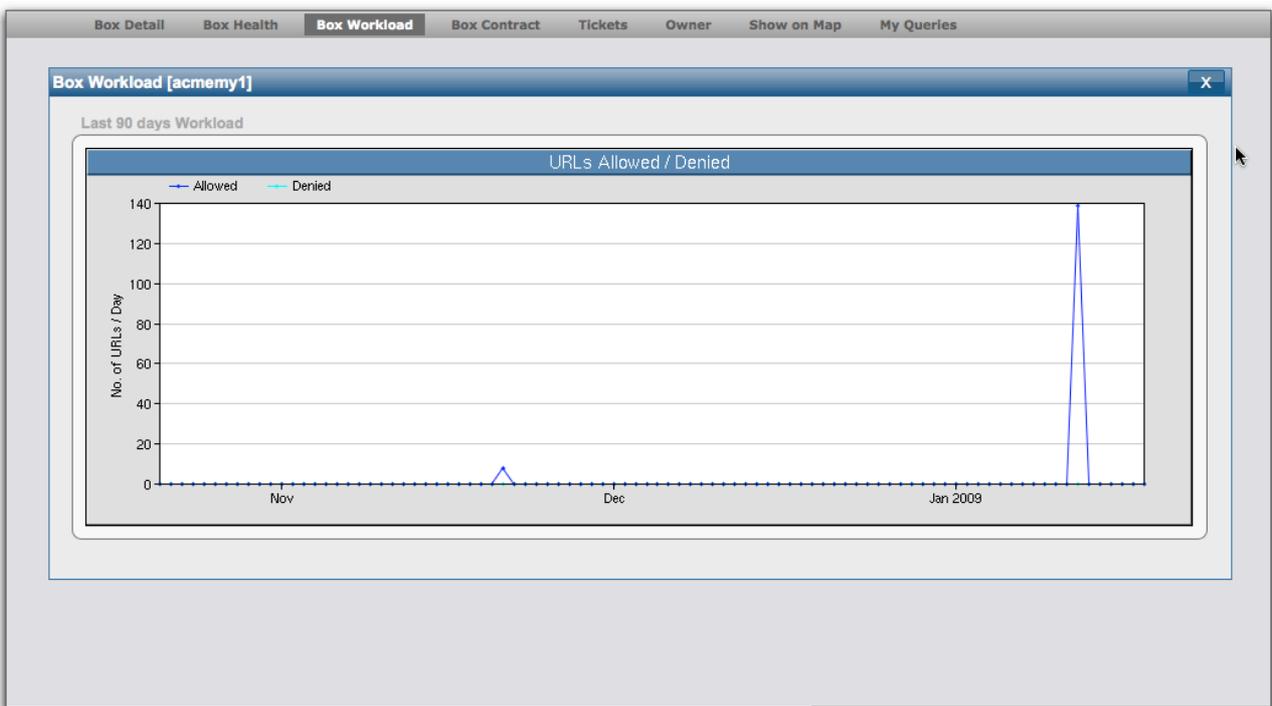
The MAIL workload chart shows you the last 90 days of MAIL activity. The chart represents the number of email messages and deliveries<sup>4</sup> passing through the box each day.

<sup>4</sup> An email message may be addressed to more than one recipient. Each delivery may also require several delivery attempts (if the remote server is unavailable or temporarily refuses to accept delivery). In such cases, it is not unusual to see the number of deliveries as larger than the number of messages.

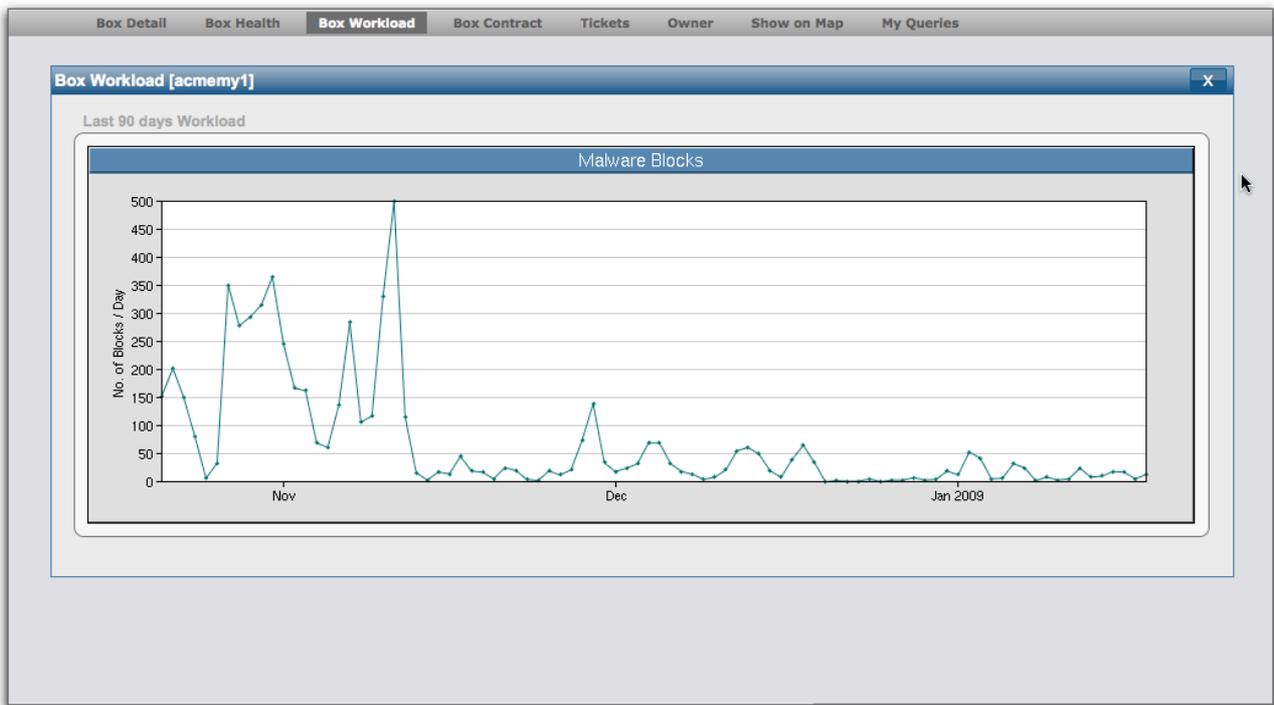
Network Box



The NETWORK workload chart shows you the last 90 days of NETWORK activity. The chart represents the average Bytes/Second received and transmitted across all network interfaces, per day.



The WEB PROXY workload chart shows you the last 90 days of WEB PROXY activity. The chart represents the number of URLs allowed and denied per day.



The MALWARE workload chart shows you the last 90 days of MALWARE blocking activity. The chart represents the number of malware blocks enforced per day.

### A Note on Workload Evaluation

When evaluating workload on a box and how 'busy' the box is, you need to look at various aspects of the system. The workload charts provided by the *Box Workload* system should provide you the basic information.

- Looking at CPU, DISK and NETWORK utilisation (and comparing to other Network Boxes of the same model) will allow you to estimate the effect of the loading on a box.
- Looking at FIREWALL, IDP, MAIL, WEB PROXY and MALWARE workloads will allow you to see the cause of the loading.

In particular, comparing these charts over time will let you see how workload has changed over time, and how the box loading is coping with that workload.

More detailed workload information is available from the my.network-box.com administrative information on the box itself, but having these charts available in one place (Box Office Customer Portal) allows you to more easily and quickly compare loading and workload across a collection of Network Boxes.

## Box Contract View

The screenshot displays the 'Box Contract View' for a specific contract, 'DEMO-ACME-1'. The interface is organized into several sections:

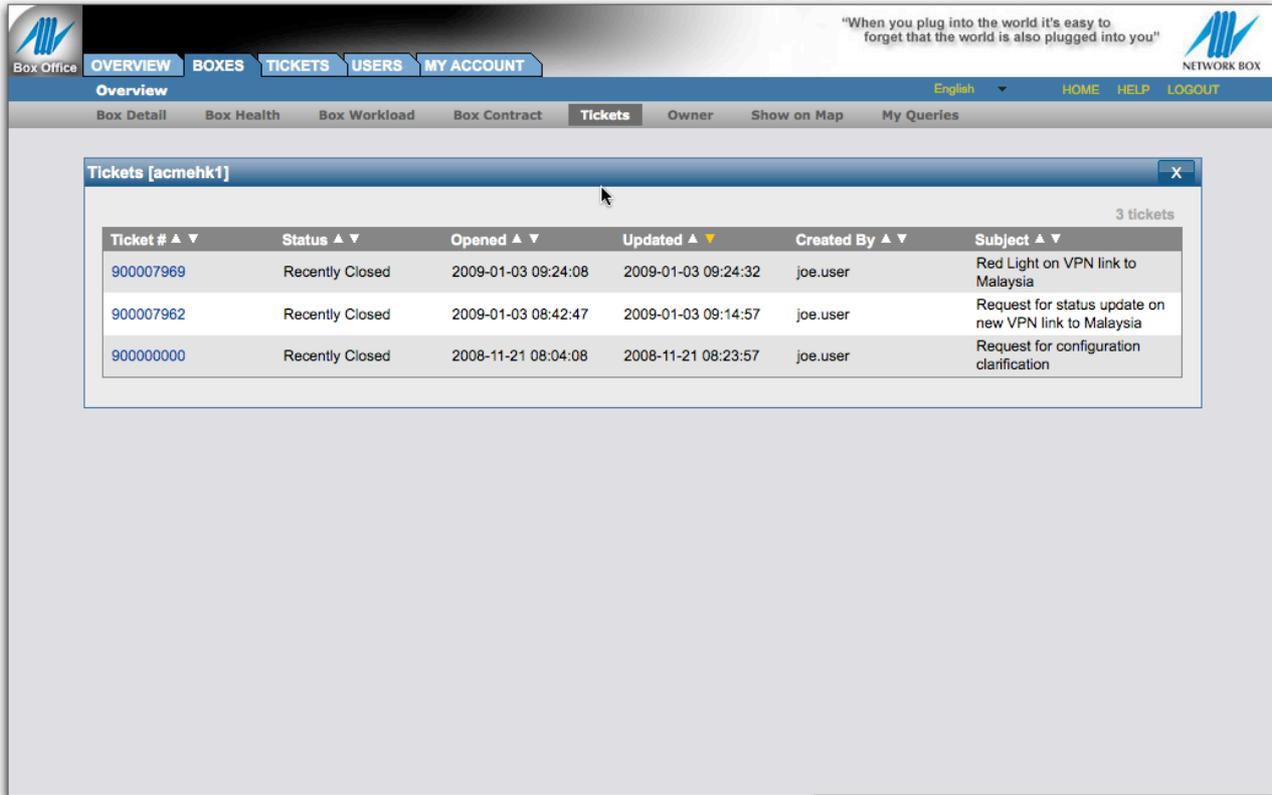
- Contract Details:** Shows the Contract ID as 'DEMO-ACME-1' and the Owner as 'ACME Holdings Ltd'.
- First Part:** Displays key terms: Start Date (2008-10-01), Term Months (36), Complete Date (2011-10-01), and Status (CONFIRMED).
- Actions:** Provides options to 'Replace Contract' or 'Renew Contract'.
- Table of Associated Boxes:** Lists four boxes covered by the contract, including their IDs, types, service types, SLAs, and sites.

Box ID	Type	Service Type	SLA	Site
acmehk1	E-1000	E-1000-UTM+	standard	ACME-HK
acmemy1	M-250	M-250-UTM+-SU	standard	ACME-MY
acmeph1	M-380	M-380-UTM+-SU	standard	ACME-PH
acmesg1	M-380	M-380-UTM+-SU	standard	ACME-SG

The Box Contract View allows you to see the detailed status of active service contracts for your Network Boxes. The drop-down menu shows you the contract IDs for all active contracts referencing the selected Network Box. Selecting a contract from that menu brings up the above display on contract detail.

The contract terms (eg; start date, term (months), completion date and status) are displayed, as well as the boxes covered by the contract (and SLA terms).

## Box Tickets View

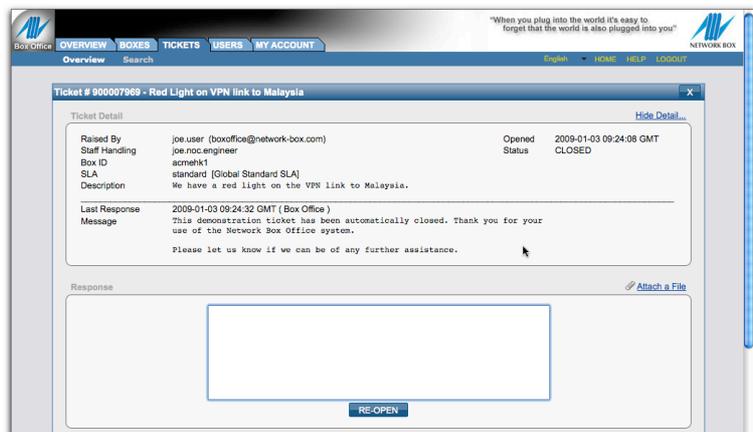


The Box Tickets<sup>5</sup> View shows you tickets raised on the selected Network Box. Note that the times shown are in UTC (Greenwich Mean Time) to allow them to be globally comparable (but that SLA times are usually in the time zone of the NOC actually providing the service).

Clicking on a ticket number will transfer you to the TICKETS module to see the detailed information on the ticket.

Once in the TICKETS module you can work further with tickets and respond to them to discuss the issue with the NOC.

Note that while you can also telephone the NOC for assistance, we ask that you always raise a ticket for each issue so that it is clearly authorised. You should also restrict each ticket to one issue (unless the issues are clearly related).



Further information on this functionality is available in the next chapter of this user guide.

<sup>5</sup> Tickets are the primary means of communicating with a Network Box NOC. They allow issues to be tracked, in detail, and worked through to completion - with everyone involved aware of the status and progress of the issue.

## Box Owner View



The Box Owner View shows you the details for the owner of the selected Network Box.

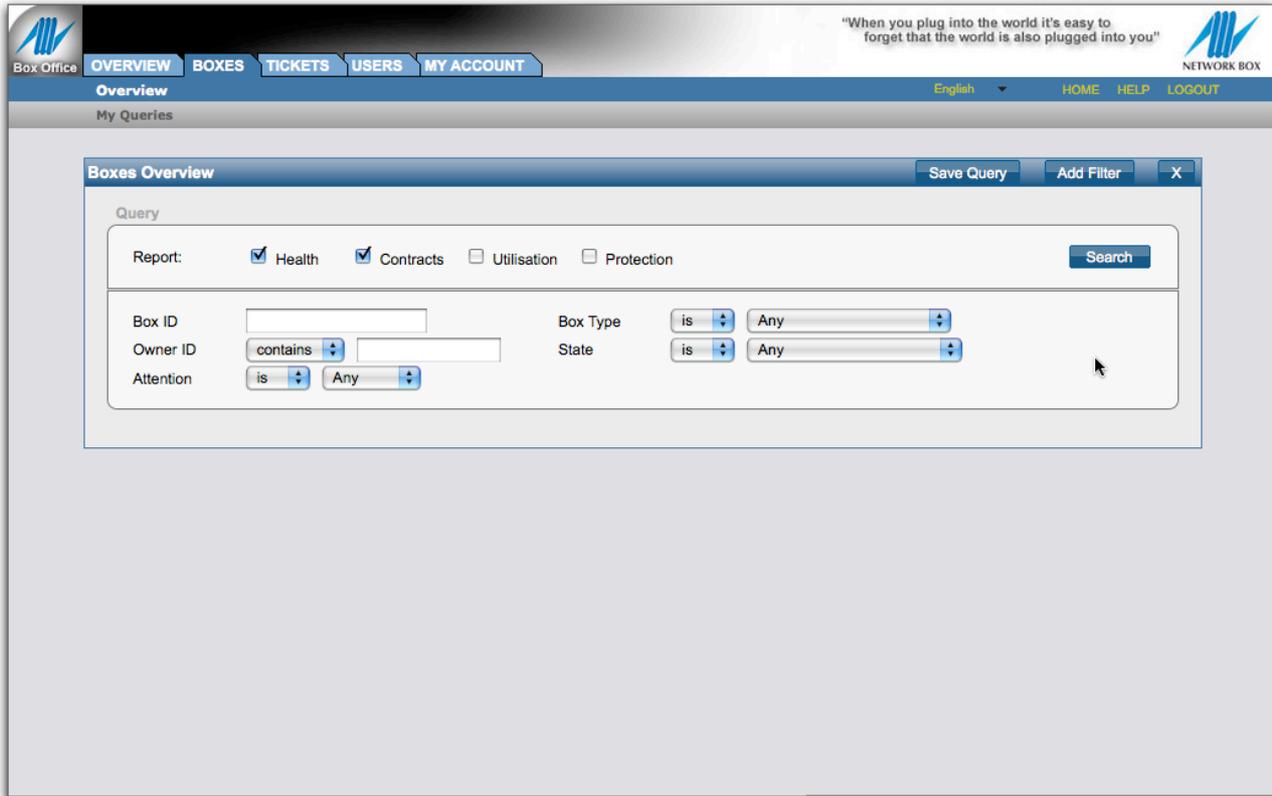
Network Box Owners are arranged in a hierarchy, as follows:

- Headquarters refers to the HeadQuarters providing final level support. This is a Network Box Office.
- Country Office refers to the country support office and is usually a Network Box Office providing NOC support.
- Distributor, Dealer, Reseller and End-User levels are available for the sales and customer hierarchy.

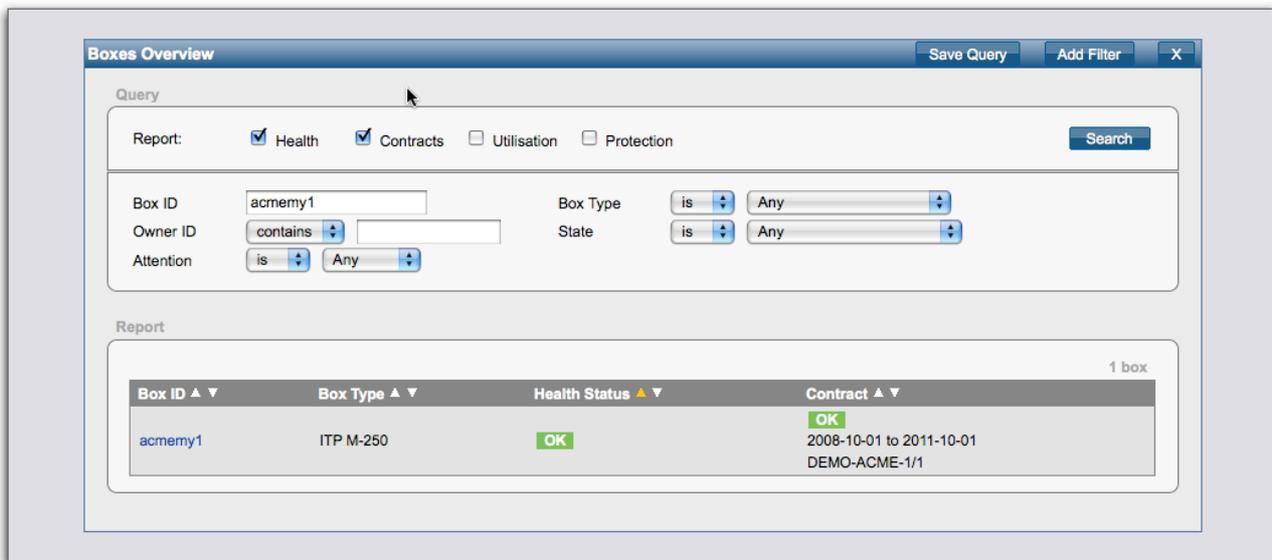
Each Network Box has an ownership hierarchy and only one owner can be defined at each level. In this way, a distribution, sales and global office ownership arrangement can be supported.

Let's use the Acme demonstration office as an example. In this case, we use two levels of ownership to control the box ownership and be able to limit access to (and visibility of) Network Boxes appropriately. The Acme demonstration office has a headquarters in Hong Kong, so we create an owner account called "acmehk" and set that as the reseller for all Acme Network Boxes. Box Office users belonging to that owner can thus see all Acme boxes. Acme also has offices in Philippines, Malaysia and Singapore, so we create owner accounts called "acmeph", "acmemy" and "acmesg" and set those as the end-user for the respective boxes. Now, Box Office users belonging to those three owners can only see the Acme boxes in their own countries. This is just one such example arrangement. The ownership hierarchy mechanism allows for very flexible definition of ownership hierarchies and for user permissions to propagate down those hierarchies.

## Reporting on Network Boxes and Grouping

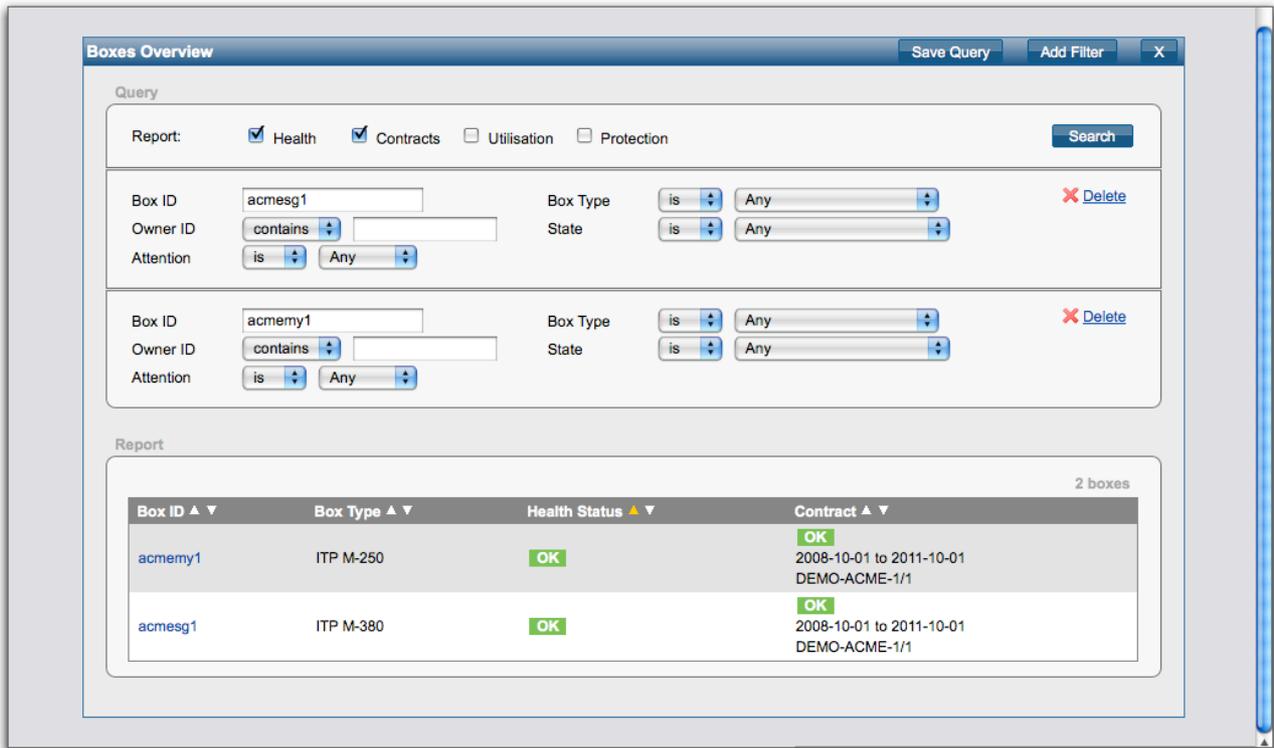


The Boxes Overview screen of the BOXES module allows you to report on inventory, health, contracts, utilisation and protection of your Network Boxes. It appears as a standard search box, but has the ability to define multiple search filters. For example, to search for one box (eg; acmemy1) enter the boxid into the appropriate field, and click the *Search* button to display:



We can then add another different box to the report by clicking *Add Filter*, entering the second boxid into the second filter that appears and then clicking *Search* again.

Let's do that for the acmesg1 Network Box and see the result.



The boxes selected by the two filters are combined into a single report. In this way, complicated search reports can be built up by combining different results from different search filters.

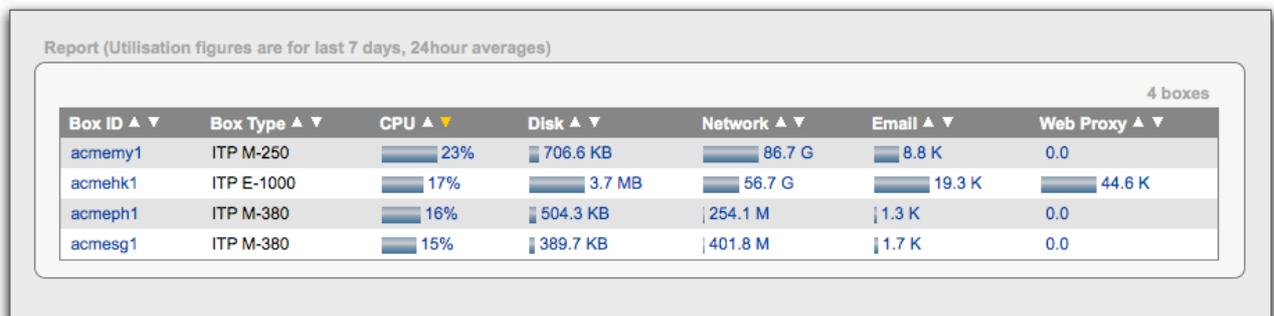
To remove a filter from your report, just click the *X Delete* button in the filter you don't want and re-run the search.

The tick boxes in the "Report:" section at the top of the search form control what fields you want to display on the report. These are:

- Health (to show the health status).
- Contracts (to show the active contracts).
- Utilisation (to show the box utilisation workload).
- Protection (to show the box protection workload).

In particular, the utilisation and protection fields allow you to compare workload across multiple boxes. The figures shown for utilisation and protection workload are 24 hour averages for the past seven days.

Let's see the utilisation of all the Acme Network Boxes:



You can use the up and down arrows next to each column heading to force the report to be sorted by that column. In the above example, it is sorted by CPU utilisation percentage (in descending order).

## Network Box

Once you have a report how you like it, you can save it by clicking the *Save Query* button at the top of the form. Let's do this for our two-filter query for acmemy1 and acmesg1 Network Boxes:

We enter a name for the query (MY+SG) in the appropriate field, and click *Save* to save the query.

As the same query is available on the OVERVIEW module map (as a Group), we can also specify, for each sub-filter, what we would like to show on the map. The boxes selected by the filter will always be shown, but we can also optionally choose to show VPNs and/or Reachability links for the selected boxes.

Once the query has been saved, it will be available in the *My Queries* drop-down menu and on the OVERVIEW module (as a Group). You can quickly see what this looks like by clicking on the *Show on Map* link presented after you save a query.

Groups	Search	GO
Default		Report >
Global View		Report >
MY+SG		Report >

## Network Box

To retrieve a previously saved query, first call up the search form via the BOXES module, then choose the query you want to retrieve from the *My Queries* drop-down menu shown in the Quick Link Bar. Alternatively, you can choose the query (Group) from the *OVERVIEW* module with the “Report >” link shown next to each group.

The screenshot shows the 'Boxes Overview' search interface. At the top, there are buttons for 'Delete Query', 'Save Query', and 'Add Filter'. The current query is 'MY+SG'. The 'Report' section has checkboxes for 'Health' (checked), 'Contracts' (checked), 'Utilisation' (unchecked), and 'Protection' (unchecked). Below this are two filter rows. The first row has 'Box ID' set to 'acmesg1', 'Box Type' set to 'is' and 'Any', 'Owner ID' set to 'contains' and an empty field, and 'State' set to 'is' and 'Any'. The second row has 'Box ID' set to 'acmemy1', 'Box Type' set to 'is' and 'Any', 'Owner ID' set to 'contains' and an empty field, and 'State' set to 'is' and 'Any'. A 'Search' button is located to the right of the report checkboxes. Below the filters is a 'Report' section showing a table with 2 boxes. The table has columns for 'Box ID', 'Box Type', 'Health Status', and 'Contract'. The first row shows 'acmemy1' with 'ITP M-250' type, 'OK' health status, and contract '2008-10-01 to 2011-10-01 DEMO-ACME-1/1'. The second row shows 'acmesg1' with 'ITP M-380' type, 'OK' health status, and contract '2008-10-01 to 2011-10-01 DEMO-ACME-1/1'.

Box ID	Box Type	Health Status	Contract
acmemy1	ITP M-250	OK	2008-10-01 to 2011-10-01 DEMO-ACME-1/1
acmesg1	ITP M-380	OK	2008-10-01 to 2011-10-01 DEMO-ACME-1/1

Once you've retrieved a query, you can change it and use *Save Query* to save your changes or copy it to a new saved query (by changing the name before saving it). You can also delete the query by using the *Delete Query* button shown at the top of the form.

This completes the chapter of this user guide on the BOXES module and how you can use it to obtain detailed information on your Network Boxes. Let's now proceed to the TICKETS module to see how to use that to communicate with the NOC for support.

# TICKETS Module

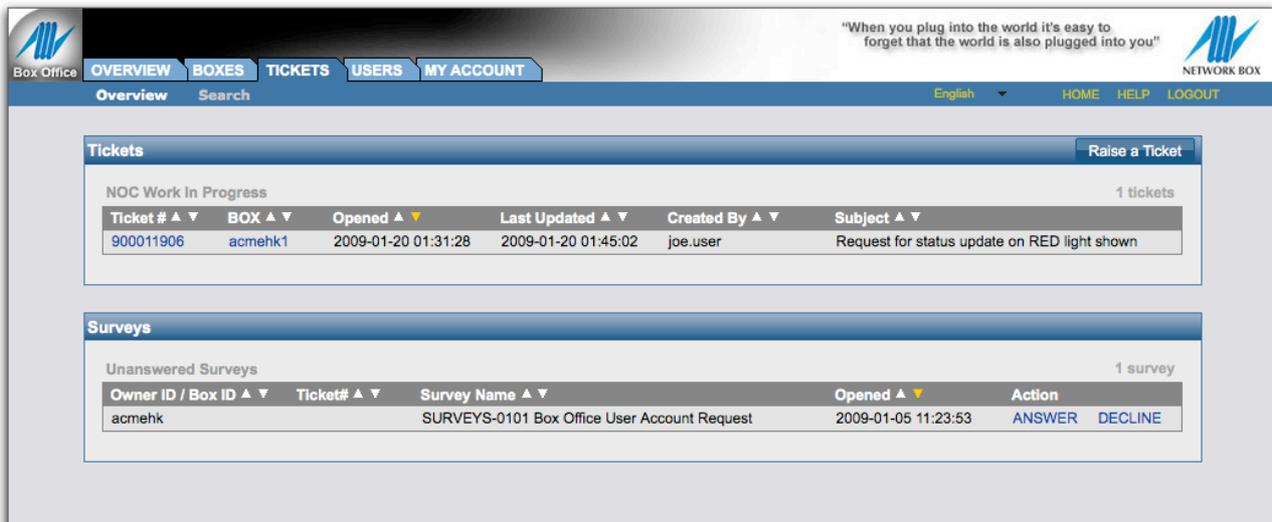
## The Tickets Module

The TICKETS module shows customer/NOC initiated tickets and their status. This forms the primary communications channel between the customer and the NOC (as it provides for formalised issue tracking, SLA conformance, and authenticated access control to change and configuration requests) This module also includes a deployment survey module for tracking the information requirements stage of deployments (including gathering the information necessary for deployment, using online collaborative tools).

While you can communicate with the NOC via email, telephone and fax, none of these channels is authenticated or encrypted in any way and are not truly secure. It is trivial to forge an email sender's address or claim to be someone you are not on a telephone call.

Access to the Network Box Office Customer Portal is protected by secure userid and password (for authenticated) and by SSL certificate (to protect against man-in-the-middle attack and provide sophisticated encrypted). A full audit trail on ticket correspondence is also maintained (providing visibility for the issue as well as detailed information on resolutions and configuration changes made).

For these reasons, we recommend that you use the Network Box Office Customer Portal as your primary means of communicating with the NOC.



You enter the TICKETS module by clicking on the TICKETS tab in the menu bar. You will then be presented with an overview screen showing you both open and recently (last 7 days) closed tickets<sup>6</sup> and survey<sup>7</sup> requests.

Let's first of all talk about tickets and then proceed to discussing surveys.

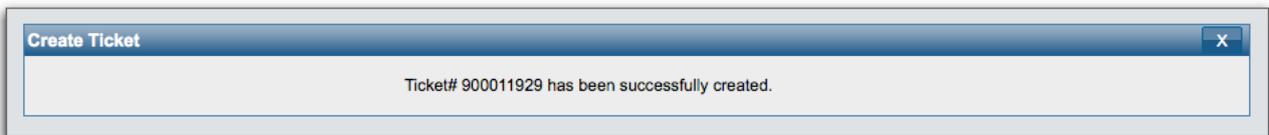
<sup>6</sup> A Ticket is an issue raised by either the customer or the NOC relating to a particular Network Box.

<sup>7</sup> A Survey is a formalised request for information raised by the NOC for completion by the customer/reseller.

## Raising a Ticket

You raise a ticket using the *Raise a Ticket* button on the overview screen of the TICKETS module. You will then have to complete the presented form:

You will need to choose the boxid from the list of Network Boxes you have access to, enter a subject and descriptive message for the work you require done or problem you are having. Please provide as much information as you can, to minimise the requirement for the NOC to come back to you for further clarification. Once done, click the *Create* button to create the new ticket.



Once you have created the ticket, a ticket number will be automatically assigned and the Network Box NOC alerted that you need support.

NOC Work In Progress						1 tickets
Ticket # ▲ ▼	BOX ▲ ▼	Opened ▲ ▼	Last Updated ▲ ▼	Created By ▲ ▼	Subject ▲ ▼	
900011929	acmeph1	2009-01-20 01:54:24	2009-01-20 01:54:24	joe.user	Permit Internet access for server 10.9.22.1 port tcp/22	

Recently Closed - Last 7 days						1 tickets
Ticket # ▲ ▼	BOX ▲ ▼	Opened ▲ ▼	Closed ▲ ▼	Created By ▲ ▼	Subject ▲ ▼	
900011906	acmehk1	2009-01-20 01:31:28		joe.user	Request for status update on RED light shown	

The new ticket will also be shown on the TICKETS module overview screen and will be marked as “NOC Work In Progress” to indicate that it is waiting on the NOC to complete the requested work.

## Checking Status of a Ticket

The screenshot shows the 'Ticket Detail' page for ticket # 900011929. The ticket title is 'Permit Internet access for server 10.9.22.1 port tcp/22'. The 'Ticket Detail' section includes the following information:

- Raised By:** joe.user (boxoffice@network-box.com)
- Staff Handling:** joe.noc.engineer
- Box ID:** acmeph1
- SLA:** standard [Global Standard SLA]
- Description:** We require external (Internet) access for our server at 10.9.22.1. Please allow port tcp/22 through from the Internet.
- Opened:** 2009-01-20 01:54:24 GMT
- Status:** CLOSED

The 'Last Response' section shows a message from the Box Office dated 2009-01-20 02:03:01 GMT, stating: 'This demonstration ticket has been automatically closed. Thank you for your use of the Network Box Office system. Please let us know if we can be of any further assistance.'

Below the response is a 'Response' section with an empty text area and an 'Attach a File' link. A 'RE-OPEN' button is located at the bottom of the response area.

You can always use the TICKET overview screen to see the status of your open and recently closed tickets. From here, clicking on a ticket number will display the detailed information on the ticket. You can use this at any time to add further information to a ticket or attach supplemental files.

## Searching for Tickets

The screenshot shows the 'Search Tickets' module. The search criteria are as follows:

- Ticket #:** (empty)
- Box ID:** contains acmeph1
- Status:** is Any
- Text:** contains (empty)

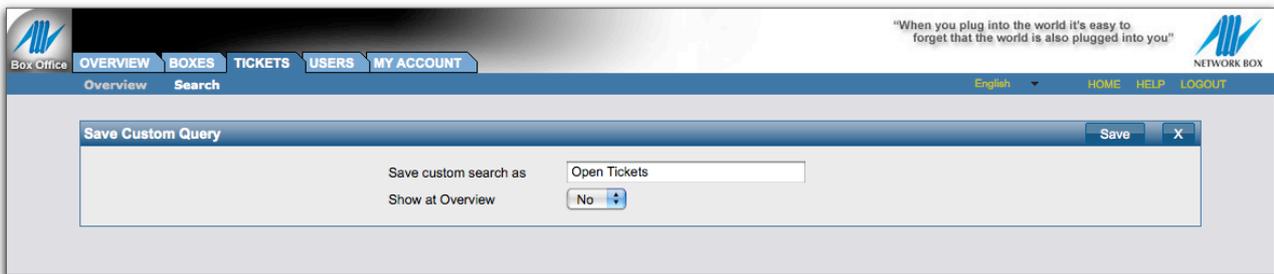
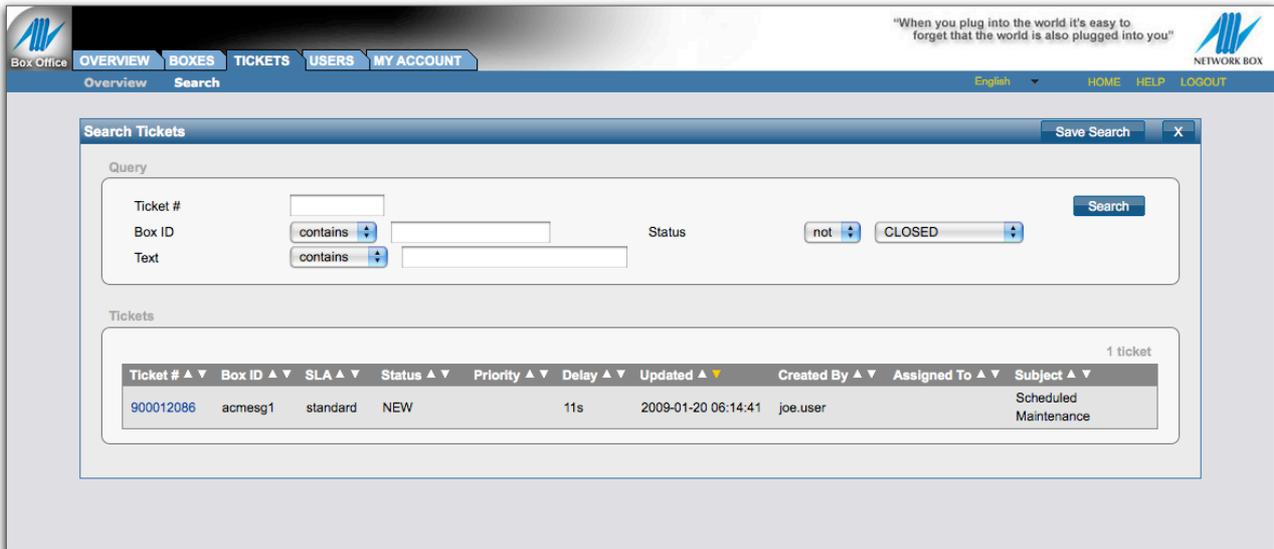
The search results show 1 ticket:

Ticket #	Box ID	SLA	Status	Priority	Delay	Updated	Created By	Assigned To	Subject
900011929	acmeph1	standard	CLOSED	3	12m 1s	2009-01-20 02:03:01	joe.user	joe.noc.engineer	Permit Internet access for server 10.9.22.1 port tcp/22

You can search for past tickets (not limited to just open or recently closed) using the TICKETS module Search function.

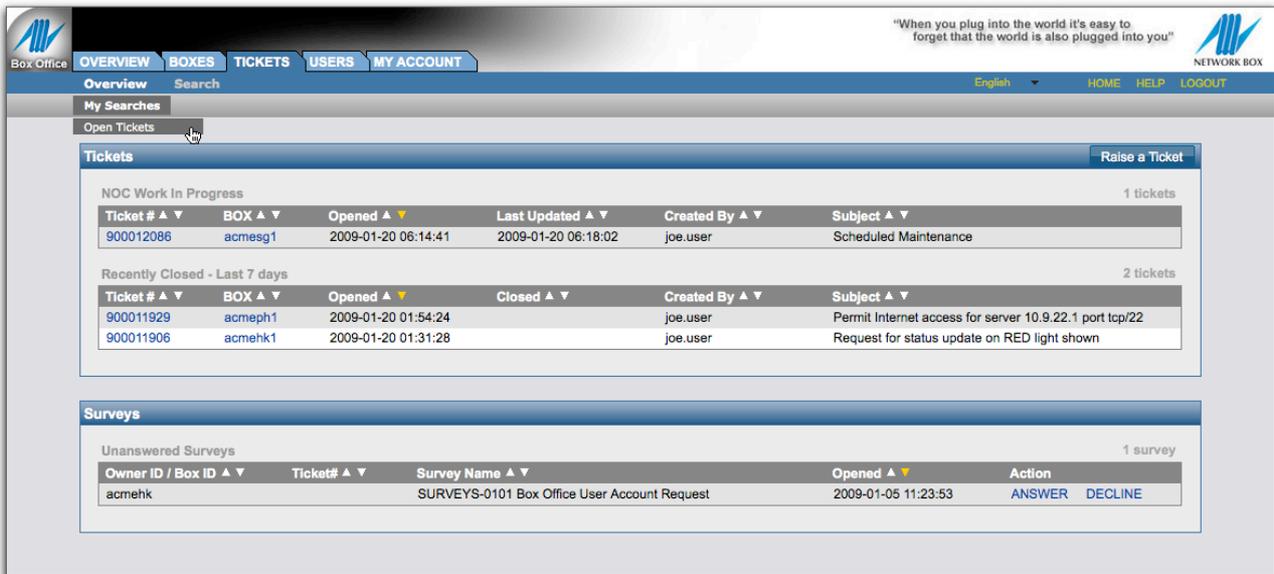
The search criteria allow you to specify any combination of ticket number, boxid, status or text. Enter your search criteria, click **Search** and summaries of matching tickets will be displayed. Clicking on a ticket number link will take you to the ticket detail view.

For example, let's enter the search criteria of "Status Not CLOSED" (to show all open tickets):

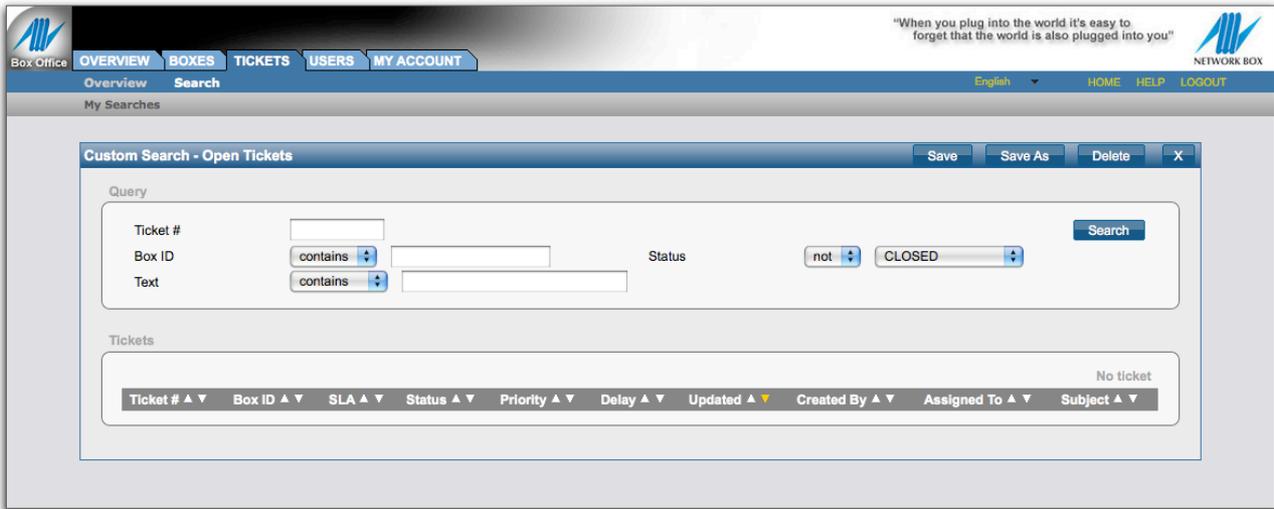


Clicking the *Save Search* button will allow you to name the search and give you the opportunity to always display it on the TICKETS/OVERVIEW page.

You can re-run saved searches from the TICKETS module, by just choosing the search from the Quick Link Bar:



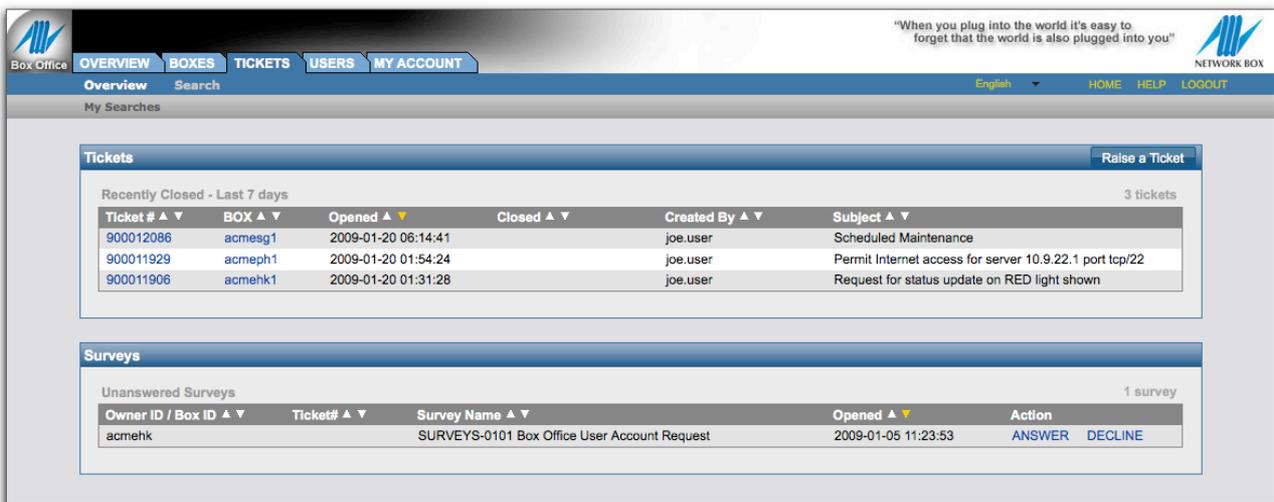
The search will be run and the result displayed as required.



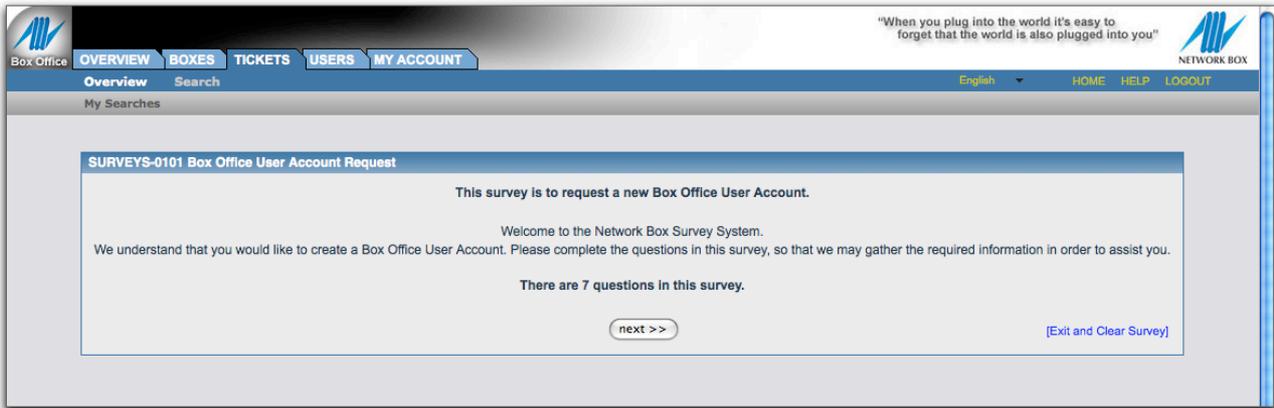
To edit or delete a saved search, first go to the TICKETS / Search screen, and then retrieve the saved search from the Quick Link Bar. You will then be able to *Save* (revise it and save it), *Save As* (make a copy under a new name) and *Delete* it as required.

## Surveys

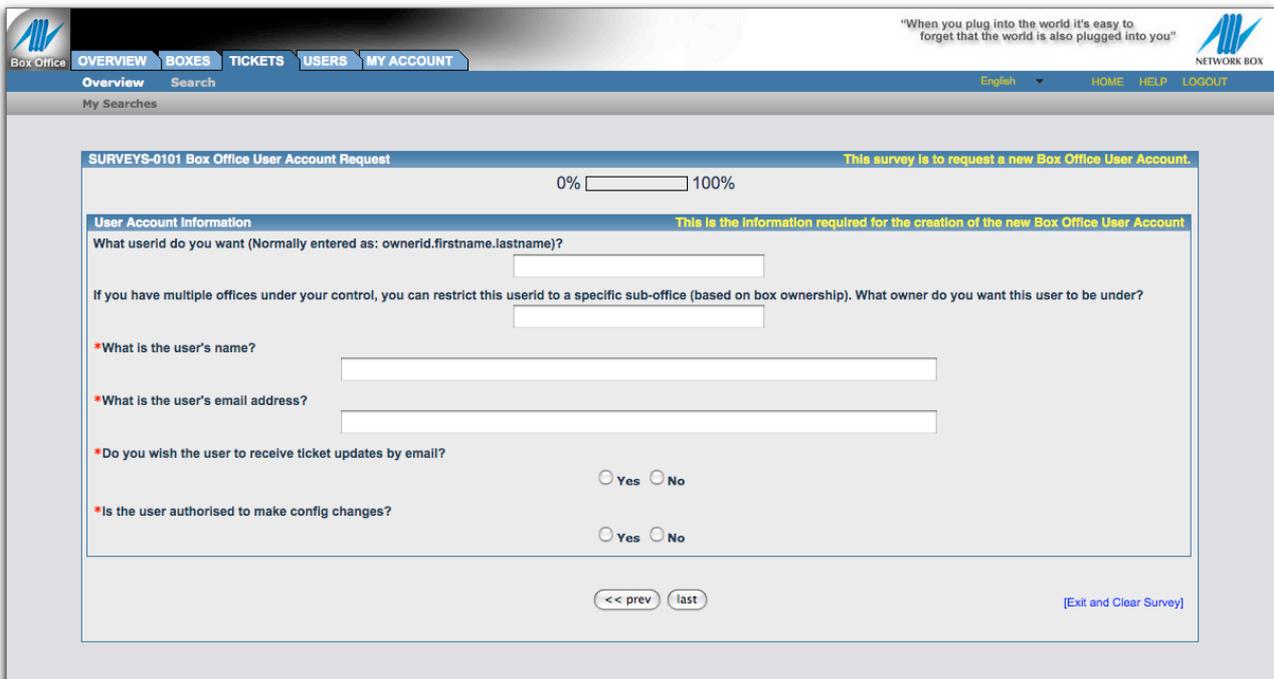
Surveys are formalised requests for information raised by the NOC for completion by the customer/reseller. If you have an outstanding unanswered surveys, that the NOC requires you to complete, you will see them in the TICKETS module overview screen.



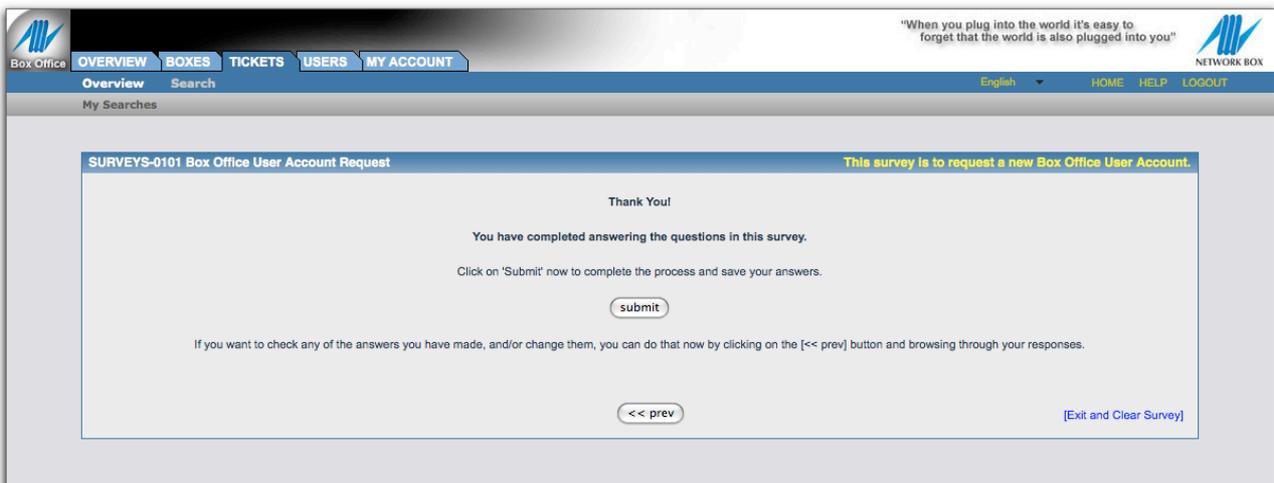
The above screen shows one outstanding unanswered survey. You can decline to answer it (using the *DECLINE* link) and proceed to answer it (using the *ANSWER* link). Let's proceed to answer this survey to see how the process works.



The first screen gives me a summary of the survey and tells me what is expected of me. In this case, there are 7 questions to be answered. Let's click "next >>" to continue with the survey:

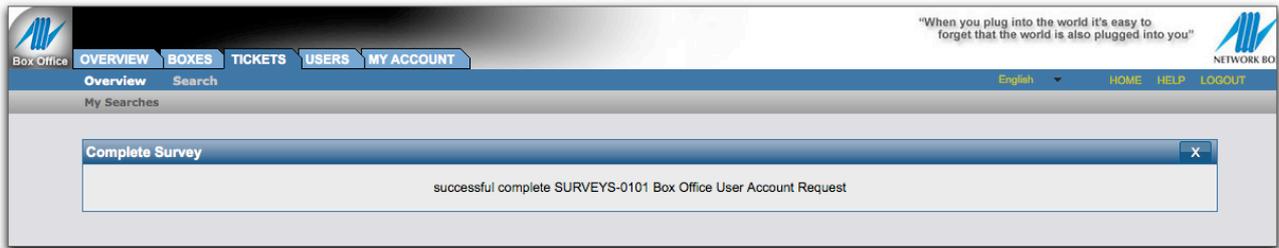


Depending on the survey, there may be multiple pages and different question types that require completion. In this case, it is quite straightforward and only requires one page. I complete the questions and click the "last" button to confirm:



## Network Box

The above confirmation stage is the last stage. Once I click "submit" the survey is confirmed and submitted to the NOC:



The survey is now complete and will appear as a recently completed survey on the TICKETS overview page. If the survey was linked to a ticket (as shown on the overview) the ticket will be automatically re-opened and brought to the attention of NOC support staff.

The screenshot shows the 'Surveys' section of the Network Box Office user interface. It displays a table of completed surveys. The table has the following columns: Owner ID / Box ID, Ticket#, Survey Name, Opened, Completed, Completed By, and Action. There is one survey listed in the table.

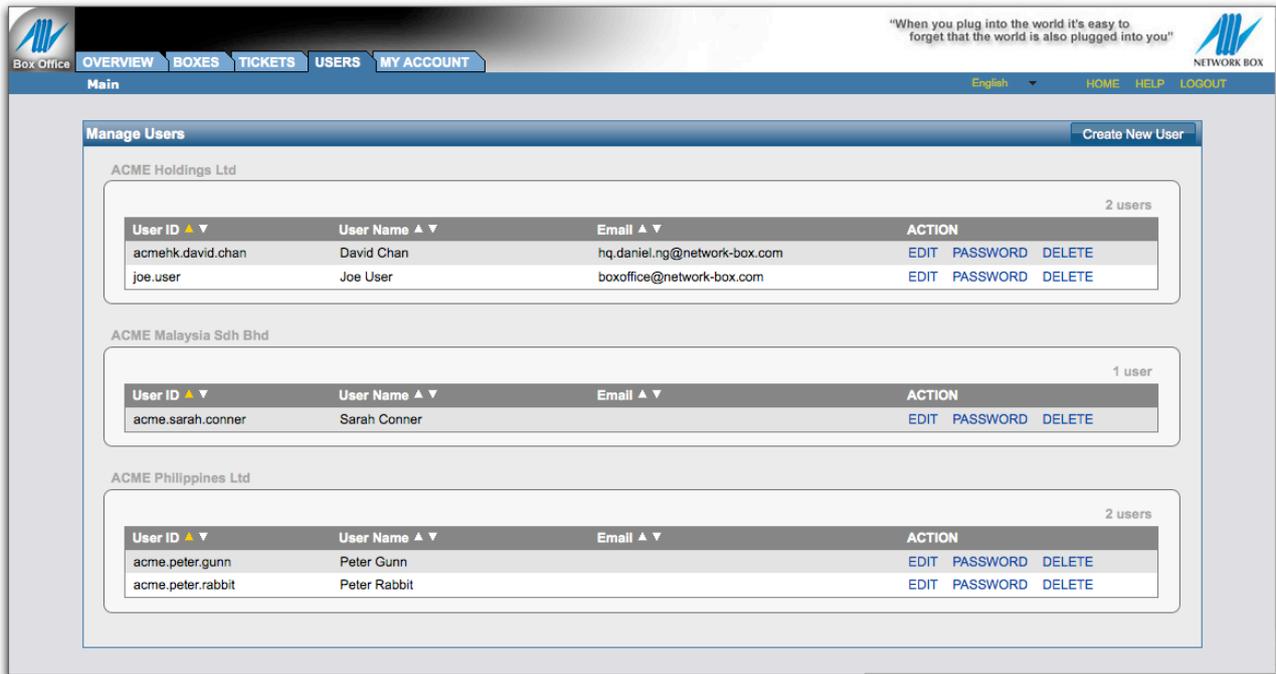
Owner ID / Box ID	Ticket#	Survey Name	Opened	Completed	Completed By	Action
acmehk		SURVEYS-0101 Box Office User Account Request	2009-01-05 11:23:53	2009-01-20 15:09:01	joe.user	<a href="#">REVIEW</a>

If you have any problems completing the information on a survey, please feel free to contact your local Network BOX NOC for assistance. The survey system is intended to streamline the data gathering process and ensure that all necessary information is collected in one shared location. This greatly streamlines configuration changes and deployments.

This completes the chapter of this user guide on the TICKETS module and how you can use it to securely communicate with the NOC for support. Let's now proceed to the USERS module to see how to use that to maintain Network Box Office user accounts.

# USERS Module

## Maintaining Network Box Office Users



You can use the USERS tab (module) to create, delete and update Network Box Office user accounts for your users. Note that access to this module is restricted and only assigned to suitable senior administrative staff. Please contact your Network Box support NOC for access to this function if you require it.

Selecting the USERS tab will display a list of users and their owners. In the example above, we have three owners (ACME Holdings, ACME Malaysia and ACME Philippines) with a total of five user accounts.

For each user, we have the option to EDIT (change the user preferences record), PASSWORD (reset the users password) or DELETE (delete the user account).

In addition, we have the option at the top right of the form to *Create New User*.

Network Box

Let's create a new user for ACME Singapore.

**Create New User** Create X

**Owner Information**

Owner \*

Owner ID

**User Information**

User ID \*   
(Preferred Format: OwnerID.FirstName.LastName)

User Name \*

Email \*

Password \*

Confirm password \*

**Notification Config**

	Default	
	<input type="checkbox"/>	All
Service Ticket Creation	<input type="checkbox"/>	Waiting for Customer
	<input type="checkbox"/>	Waiting for NOC
	<input type="checkbox"/>	My Tickets
Service Ticket Update	<input type="checkbox"/>	All
	<input type="checkbox"/>	Waiting for Customer
	<input type="checkbox"/>	Waiting for NOC
Service Ticket Reminder	<input type="checkbox"/>	My Tickets
	<input type="checkbox"/>	All
	<input type="checkbox"/>	Waiting for Customer
GMS Ticket Creation	<input type="checkbox"/>	Waiting for NOC
	<input type="checkbox"/>	My Tickets
	<input type="checkbox"/>	All
GMS Ticket Update	<input type="checkbox"/>	Waiting for Customer
	<input type="checkbox"/>	Waiting for NOC
	<input type="checkbox"/>	My Tickets
GMS Ticket Reminder	<input type="checkbox"/>	All
	<input type="checkbox"/>	Waiting for Customer
	<input type="checkbox"/>	Waiting for NOC
	<input type="checkbox"/>	My Tickets

**User Preferences**

Preferred Language \*

Preferred Portal \*

Time Zone \*

Config Changes

Config Change Text

**Newsletter Preferences**

News Releases

Technical Announcements

Security Announcements

**Additional Information**

Additional Comment

## Network Box

This is the Create New User screen that is displayed when you click *Create New User*.

We need to enter the information for the new user account, by completing the following fields:

- Owner (choose from the list of owners).
- User ID (choose a unique userid - normally of the form ownerid.firstname.lastname to ensure uniqueness).
- User Name (the name of the user).
- eMail Address (the user's email address).
- Password (a secure password entered twice as 'Password' and 'Confirm Password' fields).
- Preferred Language (choose from the list of available languages).
- Preferred Portal (choose from the list of available regional mirrors).
- Time Zone (choose from the list of available timezones).
- Notification Configuration (this is the same as the notification system in My Account, described in the "Notification Configuration" section overleaf).
- Config Changes (Tick if you want the user to be able to request configuration changes) and Config Change Text (a textual message to be displayed to NOC operators on tickets to describe restrictions/permissions on this user account).
- Newsletter Preferences (whether the user wants to receive newsletters from Network Box regarding news, technical and security announcements).
- Additional Comment (an additional textual comment for your records).

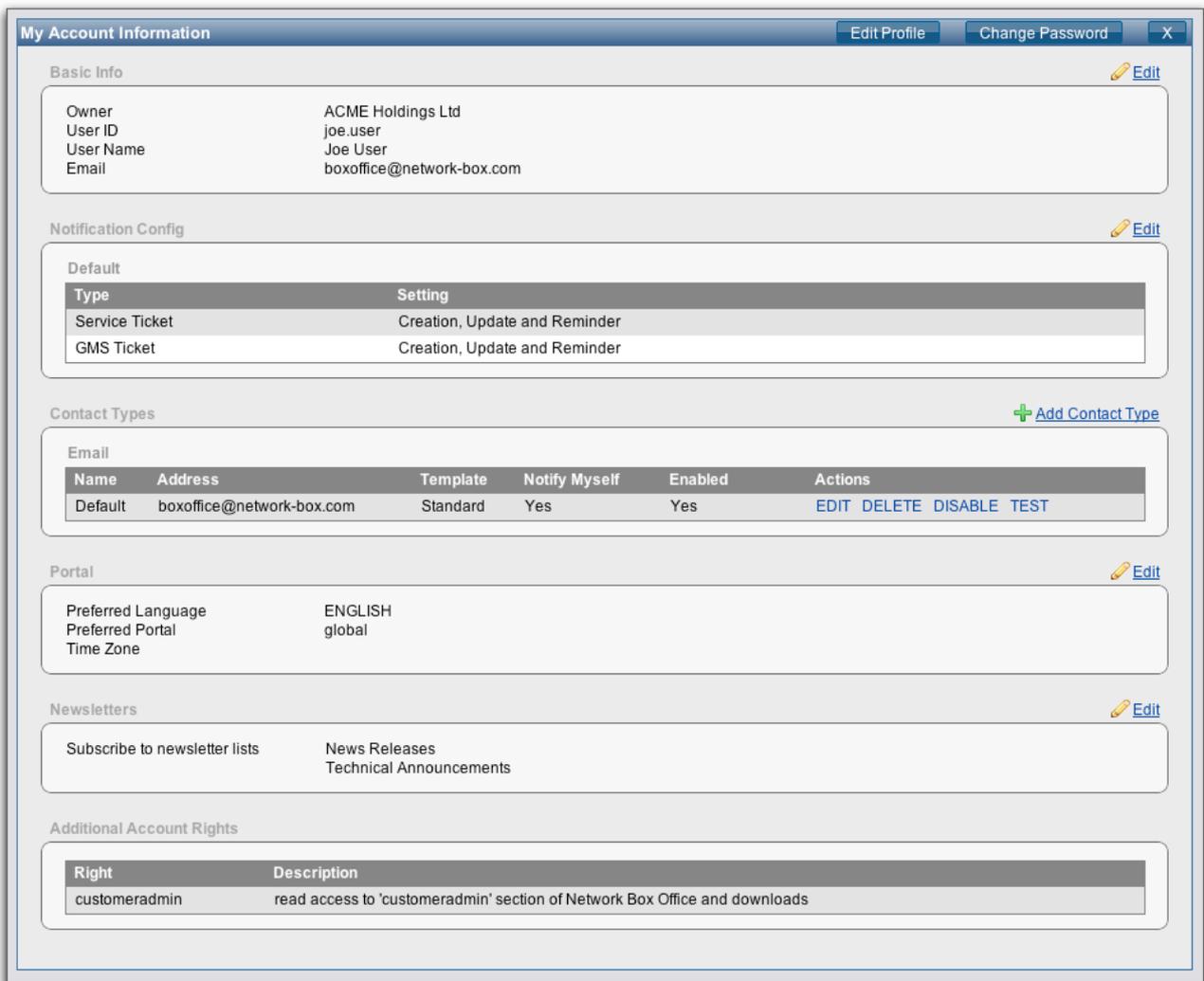
Once you click the *Create* button the new user account is validated and created automatically. The user can then login.

This completes the chapter of this user guide on the USERS module and how you can use it to maintain Network Box Office user accounts. Let's now proceed to the MY ACCOUNT module to see how to maintain your own account preferences.

# MY ACCOUNT

## My Account Preferences

The MY ACCOUNT module is used to maintain your own account preferences.

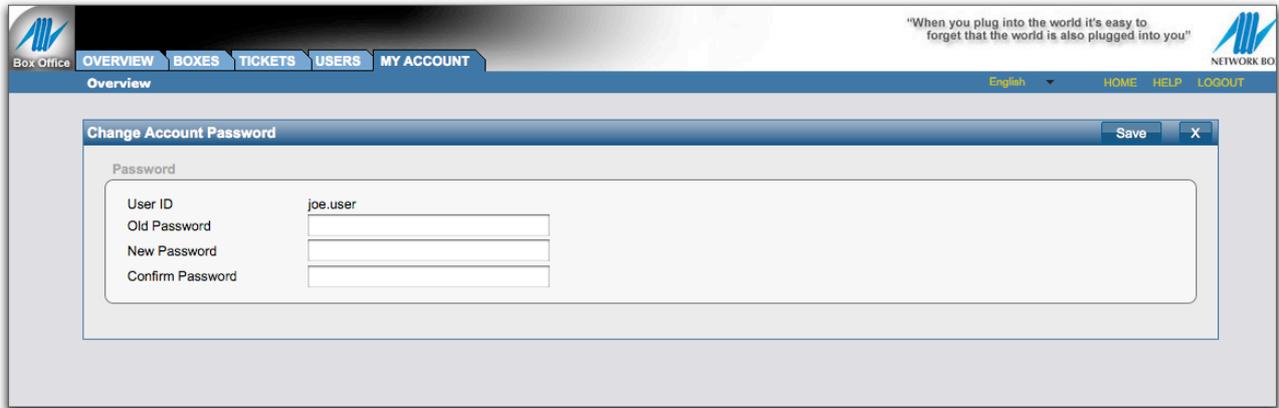


Choosing the MY ACCOUNT tab (module) will display a summary of your account preferences. You can use the *Edit Profile* button to change the following fields on your account:

- User Name (the name you want to call yourself).
- eMail Address (your preferred email email address).
- Notification Configuration (explained below).
- Preferred Language (choose from the list of available languages).

## Network Box

- Preferred Portal (choose from the list of available regional mirrors).
- Time Zone (choose from the list of available timezones).
- Newsletter Preferences (whether the user wants to receive newsletters from Network Box regarding news, technical and security announcements).

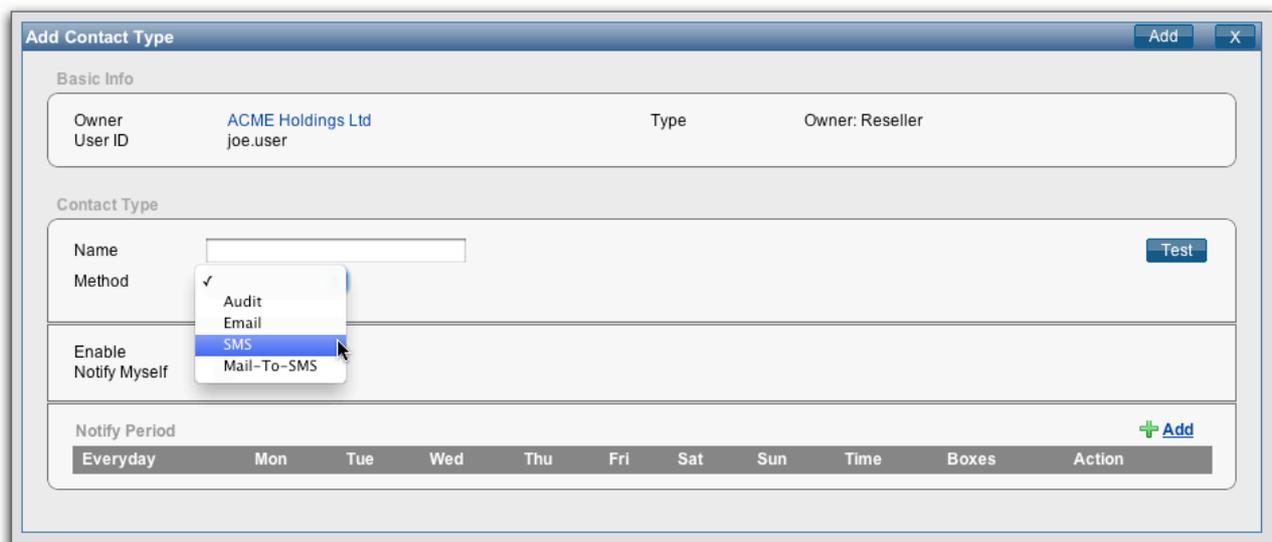


You can also use the *Change Password* button to change your password, if required. You will need to enter your old (existing) password plus your new password twice (once in the “New Password” field and again in the “Confirm Password” field). Click the Save button and your password will be changed (effective the next time you login).

## Notification Configuration

The Network Box Office Customer Portal includes a sophisticated facility to notify users of changes and events they need to know about. This is configured using My Account (and the Users Module). Configuration is performed in two stages. First, you create Contact Types (which are methods you can be contacted at, and filters to define when these contact types should be used). Then, you update the Notification Config to let the system know which events you want to be notified on, and which contact types to use.

Let's create a Contact Type by clicking the “Add Contact Type” link:



You need to give the contact type a name (a friendly name that you can choose), and choose the method to be contacted by. You can choose from Audit, Email, SMS, or Mail-To-SMS. For each of these types, you may be asked to enter additional information, as follows:

## Network Box

- Audit is used to create an audit trail of notifications. It does not send out any notifications, but merely records a notifiable event in your notification list (shown under Overview / Notifications).
- Email is used to notify you by SMTP eMail. You can choose an eMail template to use, and enter your eMail address that you want to receive the notifications on.
- Mail-To-SMS is used to notify you by Mail-To-SMS gateways. Your Mobile Phone Provider may provide such a service, whereby Network Box can send an eMail to your Mobile Phone Provider gateway, and they forward it on to you as an SMS. You can choose from the list of supported gateways provided, and enter your Mobile Phone number in the provided field. Note that this is only offered for a limited number of Mobile Phone Providers, and the provider may charge you for this service. If you are using a provider not listed, and you are certain that the provider offers such a service, please let your regional NOC know the details and we will arrange to add support.
- SMS is used to notify you by SMS message to your mobile phone. You should enter the mobile phone number that you wish to be notified using. Note that your Mobile Phone Provider may charge you for SMS messages received using this facility. To use this facility you must also obtain SMS credits from Network Box. Each SMS credit can be used for one SMS notification. Once your credit balance reaches 5, an extra (free) warning SMS will be sent to you, to let you know you need to top-up your SMS balance. Once your credit balance reaches 0, an extra (free) warning SMS will be sent to you, to let you know that you will not be receiving any further SMS notifications until your balance is topped up.

In addition, an Apple iOS Push Contact Type can be created from any supported Apple iOS device (e.g.; iPhone, iPod Touch, iPad) running the Network Box iOS App. Just answer 'Yes' when the App asks you if you would like to receive PUSH notifications, and the Contact Type will be created for you automatically (and tied to the connected iOS device).

For each contact type, you can either enable or disable the contact (using the "Enable" check box) to start / stop notifications, and you can choose whether you want to be notified for all events (including those initiated by yourself), or only those initiated by other people, using the "Notify Myself" check box.

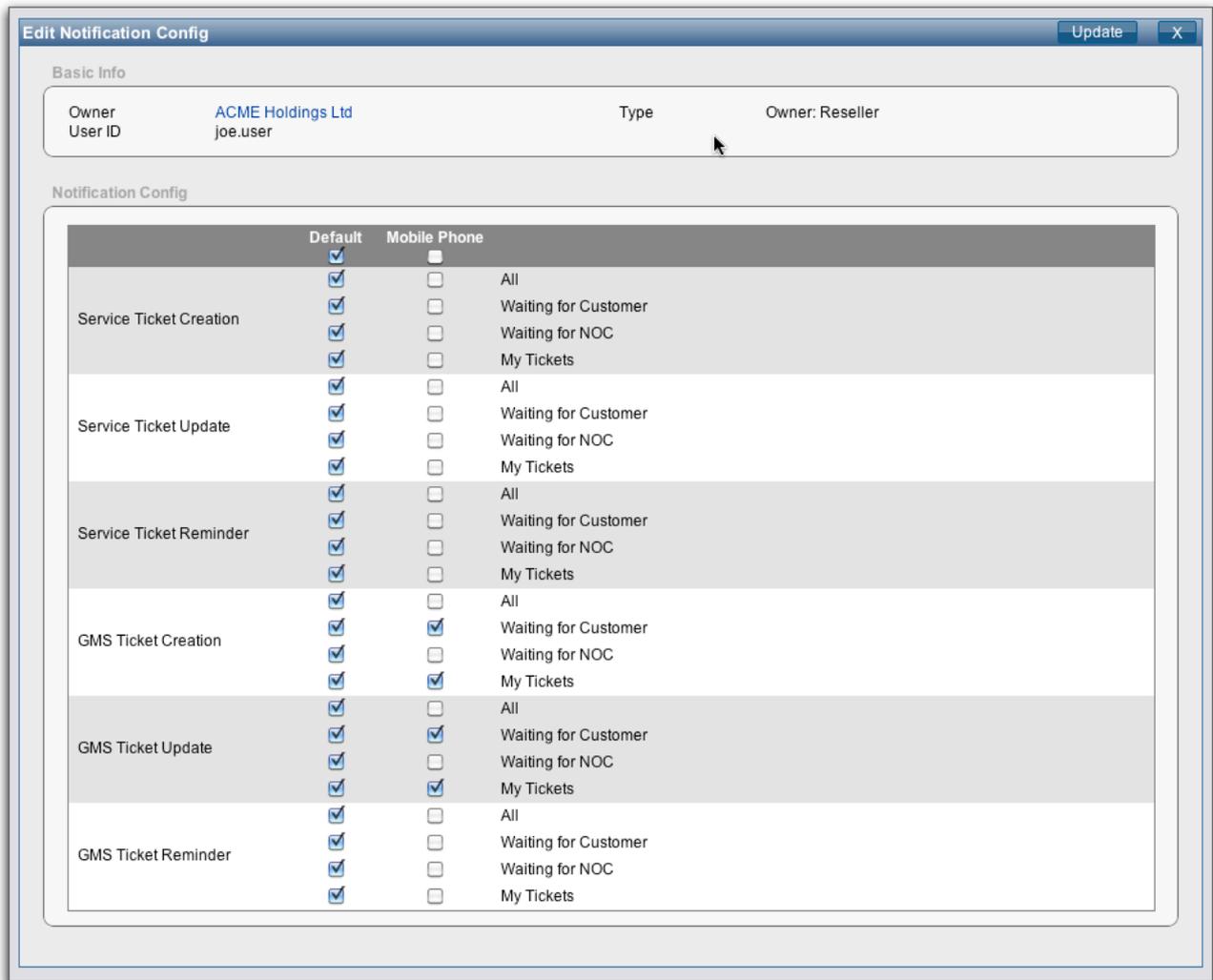
You can also define the periods that you want to be notified:

Notify Period								Time		Boxes	Action	
<input type="checkbox"/>	00:00	-	23:59	<input checked="" type="checkbox"/> All Boxes <input type="checkbox"/> HK-SG-PH <input type="checkbox"/> MY+SG	DELETE							

The default (if you don't specify anything) will be to notify you at any time of the day, any day of the week, but you can "Add" notification periods to the Contact Type, to choose the day of the week, time of day, and boxes that you want this Contact Type to be restricted to. The Boxes lists come from the Boxes module, where you define them as search Queries.

Once you have defined a Contact Type, you should click the "Test" button to test it and ensure you receive a notification correctly. Note that the test facility is not filtered by Notify Period, and should always get through to you.

Once you've defined your Contact Types, you should define the Notification Config, as below:



You can choose, for each notification type and Contact Type, if you want to receive that notification. The notification types are:

- Service Ticket creation, update and reminder (for service tickets)
- GMS Ticket creation, update and reminder (for Global Monitoring System health tickets)

Each notification type is further broken down into All, Waiting for Customer, Waiting for NOC and My Tickets, to indicate the state of the ticket (matching All tickets, only those waiting for you, only those waiting for the NOC, and only tickets you created, respectively).

## Conclusion

This completes the Network Box Office Customer Portal User Guide. We hope that you have found it useful and informative. Should you need any further information, please don't hesitate to contact your local support NOC or account manager.