

**Capex-Free
Revenue-Generating
Managed Services
that Increase Customer
Satisfaction & Loyalty while
Reducing Opex for All**



mRepublic™ features Msona's online marketplace for on-demand access to managed ICT services and applications aimed at small-to-medium sized enterprises (SMEs) and organizations.

Subscription-based

mRepublic managed services are subscription-based and customers have the full freedom and flexibility to pay for what they need and use.

No Capex, No Risk

VARs and MSPs will no longer need to invest in building any additional IT infrastructure for the delivery of profitable managed services. The risks associated with the traditional "build it and they will come" approach are eliminated while still maintaining brand and control.

Revenue-generating Day-one

Product launch-to-revenue of the mRepublic™ is the lowest in the industry as all services are immediately ready to market and sell straight "out-of-the-box".

Feature-rich & Growing

Meets and exceeds the ICT needs of SME customers with potential to grow and expand the portfolio with new revenue-generating services in partnership with Independent Software Vendors, Value-Added Resellers and Managed Service Providers.

mrepublic™

MANAGED SERVICES

Web Presence

- Domain Services
- DNS Services
- Dynamic DNS Service

Mailbox Critical Services

- Mail Continuity Service
- Mail Sanitization Services
(SaaS Anti-virus & Anti-spam)

Security Management

- Web Content Filtering Update
- Intrusion Detection & Prevention
- Security Audit

Software Management

- Software Updates & Maintenance

Collaboration & Networking

- mGroupware for Microsoft Outlook®
- Managed Dynamic VPN Service

Content Management

- mStorage Remote Back-up

Service Assurance

- System Health Monitor
- Port Monitor
- Resource Monitor
- Weekly Report

INTEGRATE MULTIPLE NETWORKING AND ICT SERVICES INTO A BUNDLE OF SERVICES AND A SINGLE ON-SITE DEVICE

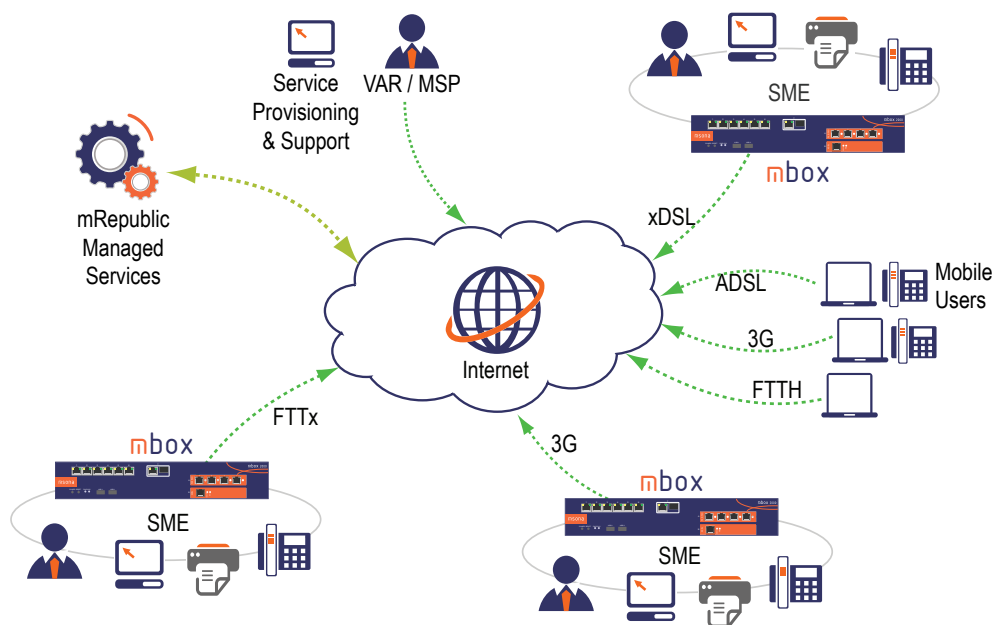
Under-resourced organizations such as Small-Medium Enterprises (SMEs) are continuously seeking ways to cut costs, increase agility and focus on building and nurturing core competencies. They often don't have time nor resources to deploy and support today's complex ICT environments effectively. Managed ICT Services deliver substantial benefits to such customers, including increased reliability and availability, predictable and recurring cost structures, higher levels of service and lower costs. Today, Value-Added Resellers (VARs) and Managed Service Providers (MSPs) are uniquely positioned to deliver comprehensive and consistent ICT managed services that enable customers to take advantage of economies of scale and also to automate their ICT management tasks to bring down costs, improve their operations and keep their infrastructure running reliably.

mRepublic™ Managed Services

The mRepublic is a family of value-add managed ICT services delivered from Msona's mCloud™ service delivery network that includes a wide range of high-performance, consistent, reliable and scalable applications. Today, these applications include email, networking, communications, security, collaboration, backup and service assurance and are presented in one easy to deploy and use environment.

mBox™ Series Deliver mRepublic™ Managed Services

All the mRepublic managed services are seamlessly delivered to end-users using Msona's World-leading Multi-service Internet Appliance platforms, the mBox Series, deployed at the customer premise.



Web Presence

Domain Services

Fully integrated Web presence and Domain management have become paramount for any organization in the 21st Century. Msona hosts DNS services for any Top Level Domain (TLD)* and acts as the registrar for a growing list of TLD owners. The Msona *Domain Services* include:

- Seamless Domain Registration, Transfer, Renewal with Top Level Domain owners
- Domain locking against unlawful transfer attempts
- Ability to manage content of WHOIS record
- *DNS Services* (see below)

DNS Services

Msona's mCloud™ service delivery network infrastructure, operates a fully redundant, secure and high-performance cluster of Domain name servers (DNS servers) distributed around the World that manage customers' hostname records. As a result, customers do not need to invest in owning and operating a name server for their registered domains. The *DNS Service* allows customers to use a registered domain name with their mBox platforms and supports a range of records illustrated in the table below.

The *DNS Service* incorporates *Dynamic DNS Service*, a very useful feature for customers hosting their own mail and web servers on-site where public IP addresses are allocated dynamically to customers' delivery points (see below). Furthermore, the *DNS Service* includes a revolutionary complimentary service for ensuring maximum

uptime and availability of email services known as *Mail Continuity Service* discussed later in this guide.

The *DNS Services product* is offered as part of the *Domain Services* bundle and is also available as a separate standalone service for customers wishing to keep their domain registration with their preferred domain service providers or looking to register with a non-supported TLD. In these scenarios, the domain service providers need to be informed to refer to Msona's DNS name servers for the actual resolution of hostnames in customers' domains.

Dynamic DNS Service

Static public IP addresses are increasingly becoming a scarce resource and most Internet Service Providers are obliged to charge a premium for having one or more static IP addresses assigned to customers. To deliver standard Internet connectivity, ISPs provision public IP addresses allocated dynamically to customers' delivery points (mBox platforms) on the Internet. If the customer has only a dynamic IP address it's impossible to run Internet services like mail servers, web servers and other services that require static public IP addressing. Msona offers the *Dynamic DNS Service* to overcome this limitation giving customers the same advantages of having a static IP address connectivity without the associated cost premium while helping ISPs better manage their pool of static public IP addresses.

*Current supported TLDs: .com, .co.uk, .it, .eu, .dk, .at, .fr, .nl, .be, .es, .ch, .ca, .us, .net, .org, .info, .biz

Supported Records	
A	This is the basic type of record that a DNS server contains and it is used to refer to hostnames.
CNAME	CNAME records (Canonical Name records) act as aliases for hostnames. Instead of mapping a domain name to an IP address (an A record), a domain name is mapped to another domain name.
MX	The Mail eXchanger record (MX record) tells mail systems how to handle mail that is addressed to a particular domain. Like CNAME records, the MX record maps a domain name to another domain name. The MX record with the lowest number is the primary mail server.
TXT	The TXT record is a generic DNS record that was originally intended to carry human-readable text in a DNS record. Today, among other uses, the TXT record is used for: <ul style="list-style-type: none">• Sender Policy Framework (SPF) Records• Domain Keys

GUARANTEED AND SECURE E-MAIL SERVICE DELIVERY IS SOMETHING THAT WE ALL EXPECT JUST LIKE HAVING AN OPERATIONAL PHONE LINE!

Mailbox Critical Services

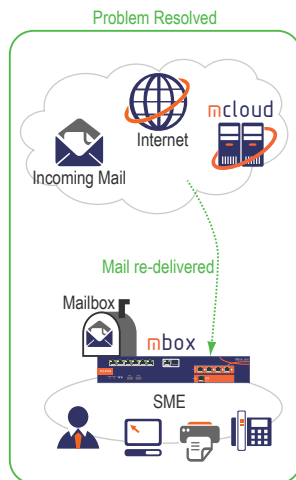
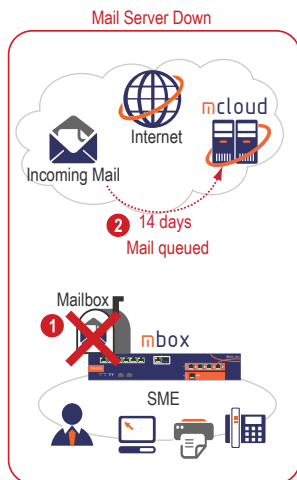
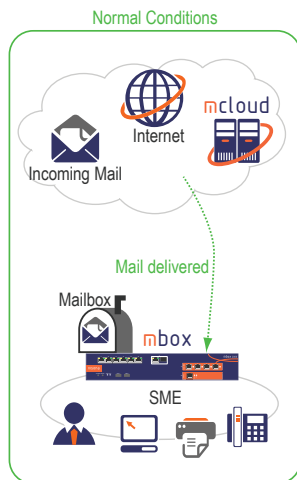
Mail Continuity Service

Many organizations typically host their own email servers on-site for maximum efficiency and control. The mail service is impacted should the Internet connection fail or a power outage occur. Emails sent during such “blackouts” will not be received and the senders would get a non-availability notification message indicating a failure of the recipient’s email system. In addition to loss of emails which would need to be resent again, this could well damage the image of the recipient business and give a bad impression about the business in general.

The *Mail Continuity Service* from Msona offers users peace of mind by queuing all their email messages at Msona’s mCloud Mail back-up servers during such difficult times when the on-site mBox™ running their email service is not reachable from the Internet. This functionality is illustrated in the diagram below.

The *Mail Continuity Service* queues up to 250,000 email messages per domain up to 14 days, which is more than sufficient for most SME customers. When the connection to the customer’s mBox is restored and the system becomes reachable online, the mCloud Mail back-up servers re-deliver all queued e-mail messages.

The *Mail Continuity Service* is offered as complementary service to the *DNS Service* bundle and currently not available as a standalone product.



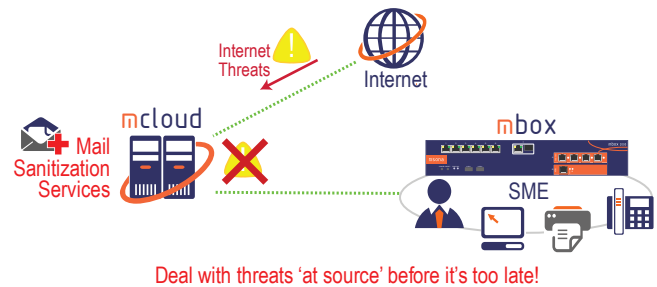
Normal Conditions:
Mail is delivered to Primary Mail Server on mBox.

Primary Mail Server Down:
Mail queued for 14 days at Msona's mail back-up on mCloud.

Problem Resolved:
Mail re-delivered when Primary Mail Server is back.

Mail Sanitization Services (SaaS Anti-Virus / Anti-Spam)

Traditionally Internet threats such as Viruses and Spams are dealt with using on-premise hardware or software systems allowing threats to reach network end-points, unnecessarily consuming bandwidth and processing resources. The *Mail Sanitization Services* from Msona enable customers to neutralize threats before they penetrate their networks and get to their systems while effectively shielding and optimizing the usage of resources.



Every email message is sent to customers after it has been verified and checked by the industry’s most rigorous scanning processes so threats stay in the Internet, far from the customers’ data and their critical systems.

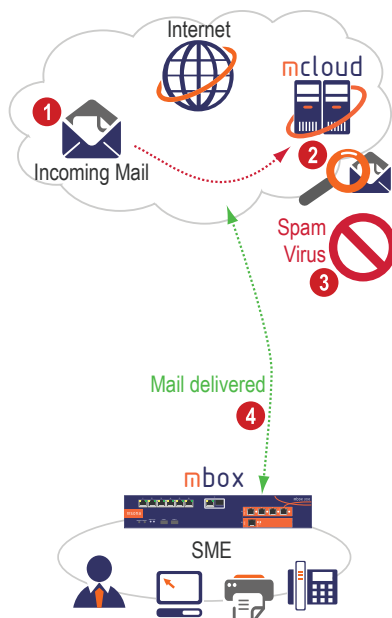
INCREASE PRODUCTIVITY AT THE WORKPLACE BY BLOCKING NON-WORK RELATED INTERNET ACTIVITY OR CYBERSLACKING !

Security Management

Features & Benefits:

- Dedicated professional system engineers monitoring virus pattern updates and performance
- Central automatic Virus signatures updates combined with World-class Anti-Virus systems
- Stops Spam and removes viruses BEFORE they get to customer's site
- No additional software installation required on LAN computers & servers
- No system load on the mBox appliance
- Inbound and Outbound verification
- Includes *Mail Continuity Service*

The following diagram illustrates *Mail Sanitization Services*:



The *Mail Sanitization Services* incorporate the *Mail Continuity Service* discussed previously and is only available for domains where Msona's *DNS Services* have been activated.

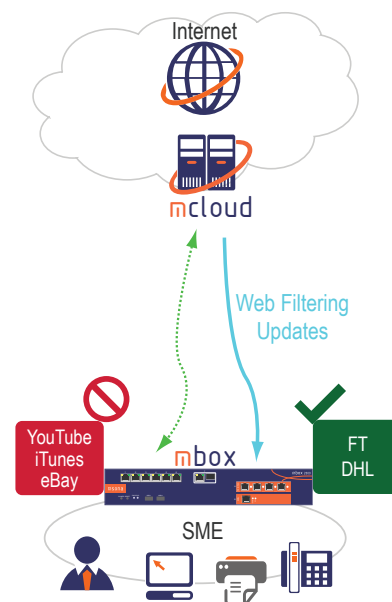
Web Content Filtering Update

The powerful and intelligent Web Content Filter system embedded in all Msona's mBox Multi-service Internet Appliances is used to block inappropriate material and to enforce organizations' Internet usage policies. As new sites appear, old ones disappear and current sites move around, the mRepublic central Web Content Filtering database is always kept current and up to date so customers' on-premise mBox platforms can receive regular updates to the web content filter lists as specified by the customer or admin staff.

Customers have the full freedom to choose which content is blocked such as inappropriate websites or files according to:

- Category (e.g. Pornography, Chat Room, Politics, Dating...etc)
- Customized URL's (e.g. Poker.Com, xxxx etc)
- Phrase Matching (e.g. "Meeting Women")
- Specific File Types (e.g. MP3, AVI...)

This is illustrated in the following diagram.



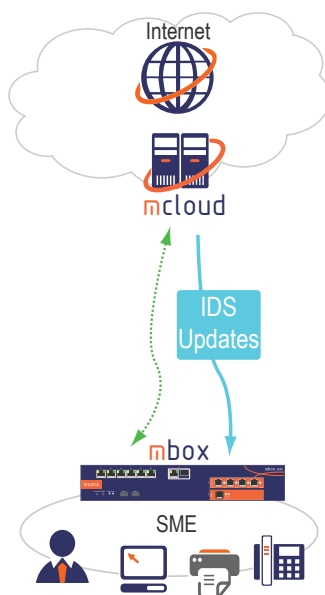
ENSURING STATE-OF-THE-ART UP-TO-THE-SECOND PROTECTION CONTROL, SECURITY, COLLABORATION AND BUSINESS CONTINUITY IS CRITICAL TO ORGANIZATIONS OF ALL SIZES

Intrusion Detection & Prevention Updates

The state-of-the-art and powerful Intrusion Detection & Prevention System (IDS) embedded in all Msona's mBox Multi-service Internet Appliances is used to detect and eliminate over 1500 types of malicious behaviours and attacks. It detects and stops activities that can compromise the security and trust of the network. The *Intrusion Detection & Prevention Updates Service* provides automatic updates to ensure latest attacks are always covered including:

- Denial of Service (DoS) attacks
- Network attacks against vulnerable services
- Data driven attacks on applications
- Host-based attacks
- Unauthorized logins and access to sensitive files
- Malware (viruses, Trojan horses and worms)

This is illustrated in the following diagram.



Security Audit

Security Audit is an automated assessment service which performs a daily system integrity check and notifies support staff of any irregularities in the overall security of the mBox Multi-service Internet Appliance platform. The Security Audit is powerful for finding clues that typically result from a system being compromised and preventing that intrusions go undetected. The tool monitors and reports changes to important files and settings on an mBox platform.

On a daily basis, the *Security Audit* service will:

1. Connect to the customer's mBox platform
2. Make sure the audit tools have not been tampered with
3. Signal the mBox to run the audit procedure
4. Wait for the audit to complete
5. Save a simple hash of the results in mCloud database for next day's check

The system will send an e-mail alert if any irregularities are detected. In the near future support for notification via SMS will be available.

Features & Benefits:

- Total integrity check of mBox platform
- Alerts administrator of any intrusions on the mBox
- Flags compromised settings and files of mBox
- Detecting changes in critical files and directories
- Checking for a change in the number of hidden files and directories
- Detecting a change in the number of super-user accounts
- Auditing the number of accounts without passwords

Software Management

Software Updates & Maintenance Service

This service ensures that the mBox platform embedded network operating system (mOS) for a given release is patched up with latest software updates to ensure seamless operation and enhanced security.

Collaboration & Networking

mGroupware for Microsoft® Outlook®

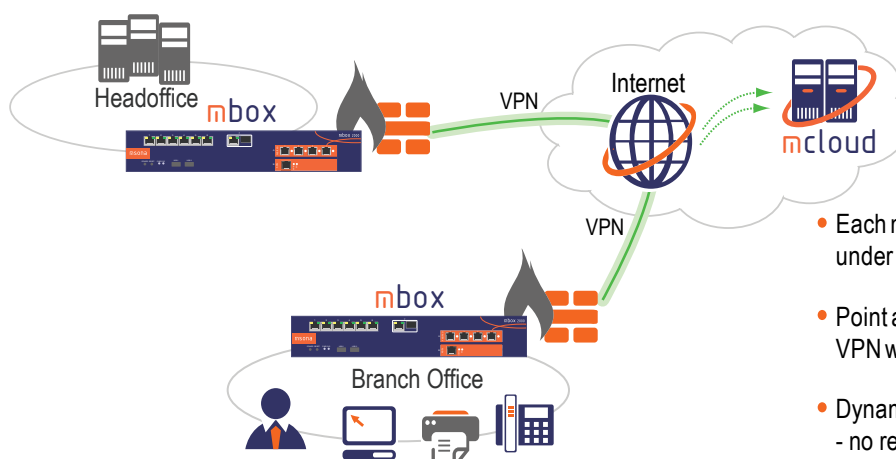
Msona offers full groupware and collaboration functionality for Microsoft® Outlook® users connected to Msona's mBox Multi-service Internet Appliances. Customers can seamlessly share calendars, contacts, tasks, emails, and folders between Microsoft® Outlook clients. This provides customers with the same benefits and experience of Microsoft Exchange® groupware functions less the cost and complexity.

Managed Dynamic VPN Service

Dynamic Virtual Private Network (VPN) Service is used to easily and securely connect two or more local networks over the Internet using the industry's standard highly-secure IPSec protocol. The service enables SMEs to seamlessly create on-the-fly their own private wide area network (WAN) without the cost of leased lines.

Features & Benefits:

- Hides all the complexity normally associated with VPN setup
- Fast and easy configuration of VPN connections
- Intelligent software to keep connections always up and running
- Support for dynamic IP addresses
- Dynamic VPN automatically tracks IP addresses -- no re-configuration required!



- Each mBox is aware of all registered mBox's under same organization through mCloud
- Point and Click to select mBox to establish VPN with.
- Dynamic VPN automatically tracks IP addresses - no re-configuration required !

Content Management

mStorage Remote Back-up

mStorage™ Remote Back-up managed service enables secure backup and restore functionality of customer's data to an off-site remote location at Msona's mCloud data-centres. After subscribing to the service and initiating the automatic installation of the mStorage service module on the mBox Multi-service Internet Appliance, customers simply choose the files they want to back up, and mStorage will do the rest.

Security is a key feature to the *mStorage Remote Back-up* managed service. All data transferred between the customer's mBox and mStorage is securely encrypted via the highly secure and robust 256-bit AES encryption technique before being sent through the Internet. Only the customer alone can access the securely stored data with the correct encryption/decryption key.

Service Assurance

System Health Monitor

System Health Monitor is a service assurance operation that checks the status of the customer's mBox Multi-service Internet Appliance on a regular basis in intervals of anywhere from every 2 minutes to every 3 hours. If a system problem occurs, an e-mail alert is sent to support staff. In the near future alerts can also be sent via SMS.

Two types of system checks are performed:

- *Port monitor* checks the connection to specific services (eg. web server)
- *Resource monitor* checks key system resources

Port Monitor

Port Monitor allows support staff or an administrator to monitor specific TCP or UDP ports related to services and applications. The feature provides a standard list of ports (HTTP, HTTPS, FTP, SSH, TELNET, SMTP) in addition to the ability to specify user-defined ports under the Custom Port Monitoring function where support staff can use this feature to monitor any application or service (e.g. Database or ERP). The frequency of the Port monitoring service is defined by support staff and can be anywhere from every 2 minutes to every 3 hours.

mBox Series Deliver mRepublic Services

The mBox Series are Msona's Multi-service Internet Appliances delivering mRepublic Managed Services at customers' premises. Msona offers a wide range of mBox Multi-service Internet Appliances aimed at organizations of all sizes.

mbox 2000 All-in-one, fully integrated and embedded software and hardware appliance platform.

mbox 4000¹ Optimised for large enterprises offering convergence with unparalleled redundancy and ultimate performance.

Please refer to products' datasheets for more detailed information or visit us @ www.msona.co.uk.

¹ Check with Msona sales representative for availability in your region.

Resource Monitor

Resource Monitor allows support staff or an administrator to monitor three key critical resources on the mBox Multi-service Internet Appliance platform against threshold levels specified by support staff :

- System load
- Disk usage
- Swap memory usage

The frequency of the Resource monitoring service is defined by the support staff and can be anywhere from every 2 minutes to every 3 hours.

Weekly Report

Weekly Report Service provides the customer with an informative overview of the customer's ICT infrastructure. The report is emailed to the customer or support staff on a weekly basis in PDF format and includes information on:

- Subscription Information to mRepublic Services
- Content Filter Updates
- Intrusion Detection & Prevention Updates
- SaaS Anti-virus and Anti-spam reports
- System Health Monitor
- Bandwidth statistics
- Security audits

Ordering Information

Please contact your local authorized Msona channel partner or visit us @ www.msona.co.uk.