



UCOPIA
COMMUNICATIONS

THE UCOPIA ADVANCE SOLUTION

THE UCOPIA EXPRESS SOLUTION

www.ucopia.com



EXPRESS

With the proliferation of mobile devices and the increasing trend of BYOD, the network operators are facing increased challenges in how to efficiently and securely manage Internet access connectivity and broadband usage.

UCOPIA solutions are a next-generation identity and access control policy platforms that enable enterprises to enforce compliance, enhance infrastructure security, and streamline their service operations all without disrupting existing infrastructure and processes.

EXPRESS 5 > 5 concurrent connections

EXPRESS 10 > 10 concurrent connections

EXPRESS 20 > 20 concurrent connections

EXPRESS 50 > 50 concurrent connections

EXPRESS 100 > 100 concurrent connections

EXPRESS 150 > 150 concurrent connections

EXPRESS 250 > 250 concurrent connections

EXPRESS 500 > 500 concurrent connections

EXPRESS 1000 > 1000 concurrent connections

UCOPIA Express is mainly aimed at small organisations (Hotels, SMB, Clinics, Schools, ...).

UCOPIA Express sits between a wired (Ethernet, DSLAM, CPL) or wireless (Wi-Fi) access network and the organisation's LAN.

All data streams from or to the user pass through the UCOPIA Express controller in order to guarantee security and improve end user experience. Based upon the model,

UCOPIA Express is able to manage up to 1000 concurrent users.

Setting up UCOPIA Express is very quick thanks to its simple and user-friendly administration graphic interfaces.



**WIRELESS LAN
CONTROLLER**



UCOPIA



FIREWALL / UTM



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SECURITY

USER AUTHENTICATION

UCOPIA Express incorporates a full server for authentication, which checks user identities. It offers authentication by Web portal particularly suited to visitors through its ease of use. UCOPIA Express includes a RADIUS server to ensure a high level of security for employees. UCOPIA Express is able to interface with any type of directory (LDAP or Active Directory). Administration of authentication policies is carried out very simply via a secure Web interface.

RIGOROUS MANAGEMENT OF ACCESS RIGHTS

Each user is characterised by his/her profile. The profile accurately describes the user's rights (Internet, messaging, internal applications). **The profiles are applied dynamically during user connection periods.**

CONFIDENTIALITY OF DATA

UCOPIA Express is compatible with the encryption mechanisms available at the access points (TKIP, AES) and standardised by the IEEE in 802.11i.

URL FILTERING

UCOPIA provides a native URL filtering mechanism. Filtering can be applied as user profile level. Several URL categories are available (Adult, Aggressive, etc.) allowing to apply different policies and to differentiate for example an "Adult" profile from a "Child" profile.

THE RETENTION OF CONNECTION DATA

As soon as an organisation provides guest access, it has a legal obligation to protect connection data for those guests, who connect to the network (European Directive 2006-24-EC and French Decree dated 24 March 2006). UCOPIA Express meets this requirement by managing session logs (who was connected when?) and activity logs (who has done what?).



MOBILITY MANAGEMENT

GUEST ACCESS

UCOPIA Express provides a response to the issues of secure guest access, zero configuration and managing user accounts. A straightforward and user-friendly Web tool enables visitors to use the network. This customisable delegation feature can be used to define the delegate administrator's remit in advance. An authorised individual will be able to use UCOPIA Express to create a temporary account, and allocate a predefined profile to it with a time slot and/or time credit.

A connection ticket will be generated and handed to the user. In addition to this visitor hosting tool, UCOPIA offers solutions allowing users to self-register on the UCOPIA portal. Under these circumstances, no third party intervention is needed; users receive their connection settings via text message on their mobile phones or buy time credit on-line making payment by credit card.

ZERO CONFIGURATION MOBILE ACCESS

User PCs, tablets, smartphones, PDAs are not always configured appropriately for connecting to the access network. UCOPIA Express allows users to connect and access network resources with no prior configuration or installation, and with no need for technical support. IP addressing, internet proxies, email, etc. are all thus handled automatically.

MANAGING ZONES

UCOPIA Express allows you to define zones: **the reception and office areas within a business, the lobby and rooms in a hotel.**

Depending upon the zone to which the user connects, UCOPIA Express provides a tailor-made authentication portal: free or chargeable, with or without time credit.

The administrator can also decide to block access to certain zones, for example preventing guests from connecting to the office zone. A zone is associated with one or several VLANs.

STRAIGHTFORWARD ADMINISTRATION

UCOPIA Express provides administration, configuration and supervision functions via a simple and intuitive Web interface. UCOPIA Express in particular allows real time display of connected users and the applications in use.



THE UCOPIA EXPRESS SOLUTION IN BRIEF

| Appliance | Express 5 | Express 10 | Express 20 |
|---|-----------|------------|------------|
| Capacity (concurrent connections) | 5 | 10 | 20 |
| Hardware | Server 20 | | |



| Express 50 | Express 100 | Express 150 | Express 250 | Express 500 | Express 1000 |
|------------|-------------|-------------|-------------|-------------|--------------|
| 50 | 100 | 150 | 250 | 500 | 1000 |
| Server 150 | | | Server 1000 | | |

ADVANCE

With the proliferation of mobile devices and the increasing trend of BYOD, the network operators are facing increased challenges in how to efficiently and securely manage Internet access connectivity and broadband usage.

UCOPIA solutions are a next-generation identity and access control policy platforms that enable enterprises to enforce compliance, enhance infrastructure security, and streamline their service operations all without disrupting existing infrastructure and processes.

ADVANCE 150 > 150 concurrent connections

ADVANCE 250 > 250 concurrent connections

ADVANCE 500 > 500 concurrent connections

ADVANCE 1000 > 1000 concurrent connections

ADVANCE 2000 > 2000 concurrent connections

ADVANCE 5000 > 5000 concurrent connections

SERVEUR BLADE > > 10 000 concurrent connections

The UCOPIA Advance product line provides all of the UCOPIA functionalities and is intended for medium to large projects. (campuses, Retail, Large venue / Public, conference center, airport etc)

UCOPIA Advance stands between a wired (Ethernet, DSLAM, CPL) or wireless (Wi-Fi) access network and the organisation's LAN.

All data streams from or to the user pass through the UCOPIA Advance controller to guarantee security, to simplify integration with the LAN, to simplify administration, and to enhance user-friendliness.

Setting up UCOPIA Advance is very quick thanks to its simple and user-friendly administration graphic interfaces.

UCOPIA Advance provides a redundancy and load distribution mechanism, allowing several thousand concurrent connections.



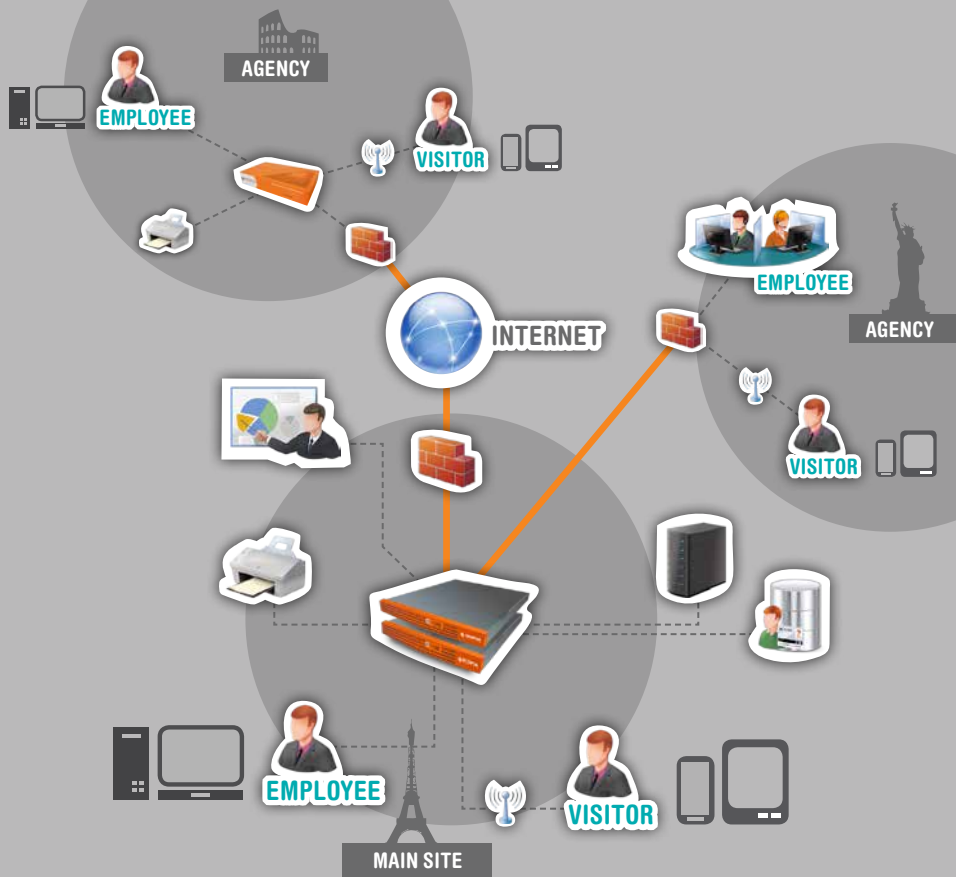
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SECURITY

USER AUTHENTICATION

UCOPIA Advance allows various authentication mechanisms based on 802.1x (PEAP, TTLS, TLS) or HTTPS protocols.

UCOPIA Advance has an embedded RADIUS server and is able to use one or more corporate directories (LDAP, Active Directory) to carry out authentication. In addition, UCOPIA Advance offers advanced authentication mechanisms such as cascading directories, a RADIUS proxy, authentication by zone, etc.

Administration of authentication policies for the various user populations is carried out very simply via a secure Web interface.

THE RETENTION OF CONNECTION DATA

As soon as an organisation provides guest access, it has a legal obligation to protect connection data for those guests, who connect to the network (European Directive 2006-24-EC and French Decree 2006-358 dated 24 March 2006).

UCOPIA Advance meets this need by managing session logs (who connected when?) and activity logs (who did what?), an indispensable mechanism for meeting the legal requirements laid down by counter-terrorism law.



✧ MOBILITY MANAGEMENT

GUEST ACCESS

UCOPIA Advance offers a straightforward and user-friendly Web tool enabling visitors to get an access to the network. Using this tool, an authorised individual will be able to create a temporary account, and select a predefined profile with a time slot and/or time credit.

A connection ticket will be generated and handed to the user. In addition to this visitor hosting tool, UCOPIA offers solutions allowing users to self-register on the UCOPIA portal. Under these circumstances, no third party intervention is necessary; users receive their connection settings via text message or by email or buy time credit on-line making payment by credit card.

STRAIGHTFORWARD AND CENTRALISED ADMINISTRATION

UCOPIA Advance provides administration, configuration and supervision functions via a simple and intuitive Web interface.

UCOPIA Advance in particular allows real time display of connected users and the applications in use.

A statistical report of user sessions in PDF format can be generated automatically and periodically (daily, weekly, etc.). The report can be emailed to one or more recipients. (ex: total number of sessions, average duration of sessions etc).

DEPLOYMENT OVER MULTIPLE SITES

In a multi-site environment, mobile users need to be given a profile adapted to the connection environment. UCOPIA Advance allows you to automatically adapt the user's profile according to different criteria: the connection location (site, zone), the connection time, or the Advance appliance through which the remote mobile user is connecting.

ZERO CONFIGURATION MOBILE ACCESS

User workstations are not always configured appropriately for connecting to the access network.

UCOPIA Advance allows users to connect and access network resources with no prior workstation configuration or installation, and with no need for technical support. IP addressing, internet proxies, email, printing, etc. are all handled automatically.

User experience is greatly increased and technical support work reduced to a minimum.



✧ SCALABILITY

UCOPIA Advance is an independent solution for Wi-Fi equipment that will flexibly adapt to any eventual changes in network and hardware architecture.

✧ HIGH LEVEL OF AVAILABILITY

UCOPIA Advance provides a redundancy and load distribution mechanism by implementing two or more UCOPIA Advance boxes. This guarantees availability of the solution in the event of a box failing. Furthermore, the load distribution between boxes allows you to respond to the requirements of any increase in load.

THE ADVANCE SOLUTION IN BRIEF

| Appliance | Advance 150 | Advance 250 | Advance 500 | Advance 1000 | Advance 2000 | Advance 5000 | Blade Server |
|--|----------------------|-------------|-------------|--------------|----------------------|----------------------|--------------|
| Capacity (concurrents connections) | 150 | 250 | 500 | 1000 | 2000 | 5000 | > 10 000 |
| Hardware (minimum request) | Server 1000 (Rack1U) | | | | Server 2000 (Rack2U) | Server 5000 (Rack2U) | Blade Server |

FEATURES

| | | | |
|----------------|---|---|---|
| SECURITY | <ul style="list-style-type: none"> • Authentication (Web captive portal - 802.1x/PEAP - 802.1x/TLS - Fixed MAC address or IP address - Automatic @MAC address authentication - Shibboleth - Seamless periodic reauthentication) - 802.1x/TLS • Redirection on corporate web portal • URLs filtering • Access permissions on basis of user profile • Controller's incoming VLANs • Outgoing VLAN redirection on basis of user profile | <ul style="list-style-type: none"> • WPA, 802.11i compliance • Ruckus DPSK • ARP spoofing protection • URLs available before authentication • Pre-authentication charter acceptance • Private information charter acceptance • Connections traceability and logs (User sessions - Traffic (URL, applications) - Automatic logs backup via FTP(S) - Automatic logs compression - Logs rotate) | |
| MOBILITY | <ul style="list-style-type: none"> • Zero configuration (DHCP/ fixed IP address - Seamless mail access - Seamless Internet Access (proxy) - Seamless printer access) • VPN pass through • QoS (by service, by profile, by user) • Time based access control (Time slots - Time credit) | <ul style="list-style-type: none"> • Location based access control (Localization on ingoing and outgoing zones) • Multi-portal (one portal per zone) • Mobile App (iPhone, Android, BlackBerry) • iPass compliance • Conditional & adaptative profile | |
| ADMINISTRATION | <ul style="list-style-type: none"> • Security and mobility policies administration • Guest hosting and provisioning (SMS, email, form, ticket printing) • User account exportation via CSV • Delegated provisioning (Customization - Multi zones - Connection ticket printing (or sending by SMS or email) - Creating accounts en masse from a CSV file) • Supervision of connected users • Statistics (Predefined graphs - CSV export) | <ul style="list-style-type: none"> • Reporting (PDF) • Customizable web portal • Customizable connection ticket • SNMP – MIB II • Syslog • CLI | |
| BILLING | <ul style="list-style-type: none"> • Online payment (credit card, PayPal, Ogone) • PMS connector | <ul style="list-style-type: none"> • PPS connector • AAA third party solutions integration (accounting) | |
| INTE-GRATION | <ul style="list-style-type: none"> • Integration with a corporate LDAP directory (OpenLDAP, ActiveDirectory) • Web proxy integration | <ul style="list-style-type: none"> • API for third party tool integration • Integration with RADIUS (proxy) • PKI Integration | <ul style="list-style-type: none"> • Directory cascading • Integration with one directory • Integration with multi-directories |
| ARCHITECTURE | <ul style="list-style-type: none"> • DHCP server (IN), DHCP client (OUT) • DNS server, relay • NAT • Routing | <ul style="list-style-type: none"> • Customized NAT based on user profile • Wired connections • Multi sites (multi controllers) • High availability | <ul style="list-style-type: none"> • Redundancy • Load balancing • Virtual appliance |

UCOPIA has 2 products lines in physical and virtual forms: Express and Advance

PHYSICAL PRODUCT LINE



| | Server 20 (UCP-SV-20) | Server 150 (UCP-SV-150) | Server 1000 (UCP-SV-1000) | Server 2000 RDP (UCP-SV-2000) | Server 5000 (UCP-SV-5000) | Server Blade (UCP-BLADE-SERVER) |
|----------------|--|--|--|---|--|--|
| UCOPIA license | Express 5 to 20 | Express 5 to 150 | Express 150 to 1000 Advance 150 to 1000 | Advance 150 to 2000 | Advance 150 to 5000 | Advance > 10 000 |
| Format | 1U Appliance | 1U Appliance | 1U Rack | 2U Rack | 2U Rack | 6 blades |
| Memory | 1 GB | 2 GB | 8 GB | 16 GB | 32 GB | 24GB (per blade) x 6 |
| Hard Drive | 160 GB | 320 GB | 1 TB | 2 * 2 TB (RAID1) | 1.8 Go (4 * 900Go Raid) | 12 x 600 GB (RAID 5) 2 x 600 GB hot spare |
| Network | 2RJ45 Connectors (10/100/1000) Base-T 802.1q | 2RJ45 Connectors (10/100/1000) Base-T 802.1q | 2RJ45 Connectors (10/100/1000) Base-T 802.1q | 7 RJ45 Connectors (10/100/1000) Base-T 802.1q, 803.ad | 9RJ45 (10/100/1000) Base-T 802.1q, 803.ad | 8 (10/100/1000) 8 (10/100/1000) backup Base-T 802.1q, 803.ad |
| Dimensions | 52 x 270 x 160 | 52 x 270 x 160 | 44 x 430 x 505 | 88 x 430 x 700 | 44 x 445 x 720 mm 19" Rack | 240x445x720mm 19" 6U rack |
| Power | 12 W | 24 W | 90 W | 250 W | 750 W * 2 | 1000 W |
| Power Supply | External | External | Internal | Hotplug (Redundant) | Hotplug (redundant)*2 | Hotplug (redundant) * 4 |

VIRTUAL PRODUCT LINE



The UCOPIA virtual appliance works on top of VMware. The online documentation: <http://www.ucopia.com/vm-faq>

| | UCOPIA VM 150 | UCOPIA VM 1000 | UCOPIA VM 2000 | UCOPIA VM 5000 |
|----------------|----------------------------|--|---------------------|---------------------|
| UCOPIA license | Express 150 Advance 150 | Advance 150 to 1000 Express 150 to 1000 | Advance 150 to 2000 | Advance 150 to 5000 |