MobiLINK Technology Overview

Route1 delivers industry-leading security and identity management technologies to corporations and government agencies who require universal, secure access to digital resources and sensitive data. These customers depend on The Power of MobiNET - Route1's universal identity management and service delivery platform. MobiNET provides identity assurance and individualized access to applications, data and networks.

www.route1.com

MobiLINK 1.0
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MobiLINK - Secure Mobile Access Technology

MobiLINK is an authentication and secure access technology that enables users to securely access internal web-enabled applications and web resources from anywhere in the world. MobiLINK utilizes the MobiNET, Route1's universal identity management and service delivery platform. MobiNET provides identity assurance and individualized access to applications, data and networks.

Technology Differentiators
• Multi-factor authentication
• Built with security as the first priority
• Integrates seamlessly into your existing IT infrastructure – minimal network changes or reconfiguration required
• PKI integration; leverages internal PKI infrastructure or your existing PKI infrastructure
• Deployment saves the enterprise money; saving more than the investment in MobiLINK for a net cost reduction
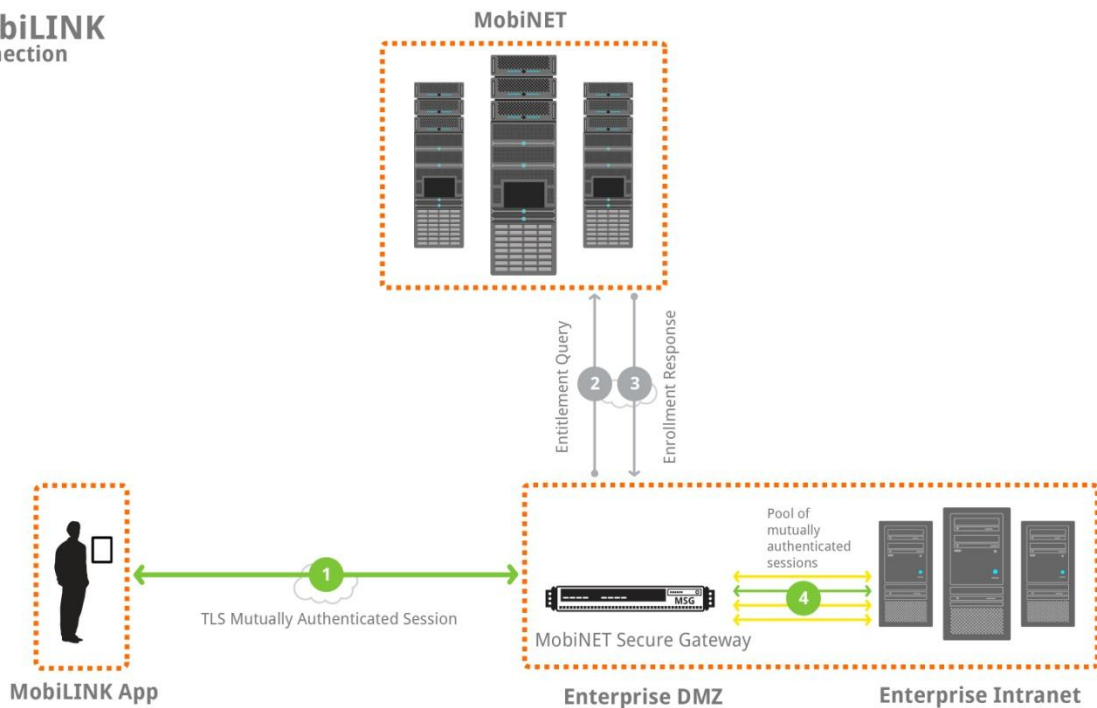
- The user launches MobiLINK and enters their password.
- MobiLINK will initiate a mutually authenticated TLS connection request to the MobiNET Secure Gateway (MSG).
- The MSG initiates a request to the MobiNET to confirm that the user is entitled to establish the connection.
- Upon receiving a positive response from the MobiNET, the MSG establishes a mutually authenticated TLS session and permits the user access to the Enterprise Application.

MobiLINK empowers enterprises to securely provide internal application(s) to the mobile workforce. MobiLINK is NOT a VPN-based technology and does not create additional nodes on the enterprise network or open your application to the outside world.

The MobiLINK technology includes the use of Route1's universal identity management and service delivery platform, a gatekeeper appliance, and application software.

> *MobiLINK application software* - A subscription based service that enables mobile users to securely access internal applications and web resources.

> *MobiNET* - A universal identity management and service delivery platform that is multi tenant. DEFIMNET is a private, single tenant instance of MobiNET.

> *MobiNET Secure Gateway (MSG)* - An appliance that sits in the enterprise's DMZ and acts as the gatekeeper when a user attempts to access an enterprise application. The MSG validates in real-time the user's entitlements, before allowing access to the internal application(s).

Features
• Compatible with iOS based operating systems • Real-time out of band tool to manage certificate based entitlements – MAP • Centralized Policy Management for application entitlements and authorized MobiLINK versions • Offers users exactly the same access remotely that they have at their office • Multiple, distributed internal applications can be accessed from MobiLINK	**For the Administrator** • Enterprise registration and deployment tools • Enterprise licensing and billing model to minimize administration • Connection history details for auditing and reporting purposes • No capital investment required **For the User** • Easy to use application with no configuration required • User only needs to enter the License Key provided and remember the password they created to securely access applications

With MobiLINK an organization can deploy their web-based resources with confidence and provide secure access of their application(s) to their mobile workforce. This attack-resistant technology eases concerns often associated with resource access. It also minimizes the complexities of network configuration, proxy settings, or firewalls, and eliminates the need to create special internal profiles to connect the user to their enterprise to access an application(s). The MobiLINK technology seamlessly handles the complications of deploying and managing user and device certificates. Establishing a secure connection requires only MobiLINK, and once the secure session is finished, MobiLINK ensures that zero foot print is left behind on the Remote asset.

MobiLINK meets an organization's regulatory compliance needs and is ideal for day-to-day computing, security, teleworking, seat reduction, disaster recovery and COOP. It is the technology of choice for organizations embracing the bring-your-own-device (BYOD) model.

Whether the organization hosts its own application(s) or leverages the flexibility of cloud-based deployments, MobiLINK and the MobiNET Secure Gateway provide a flexible model for rapid deployment.
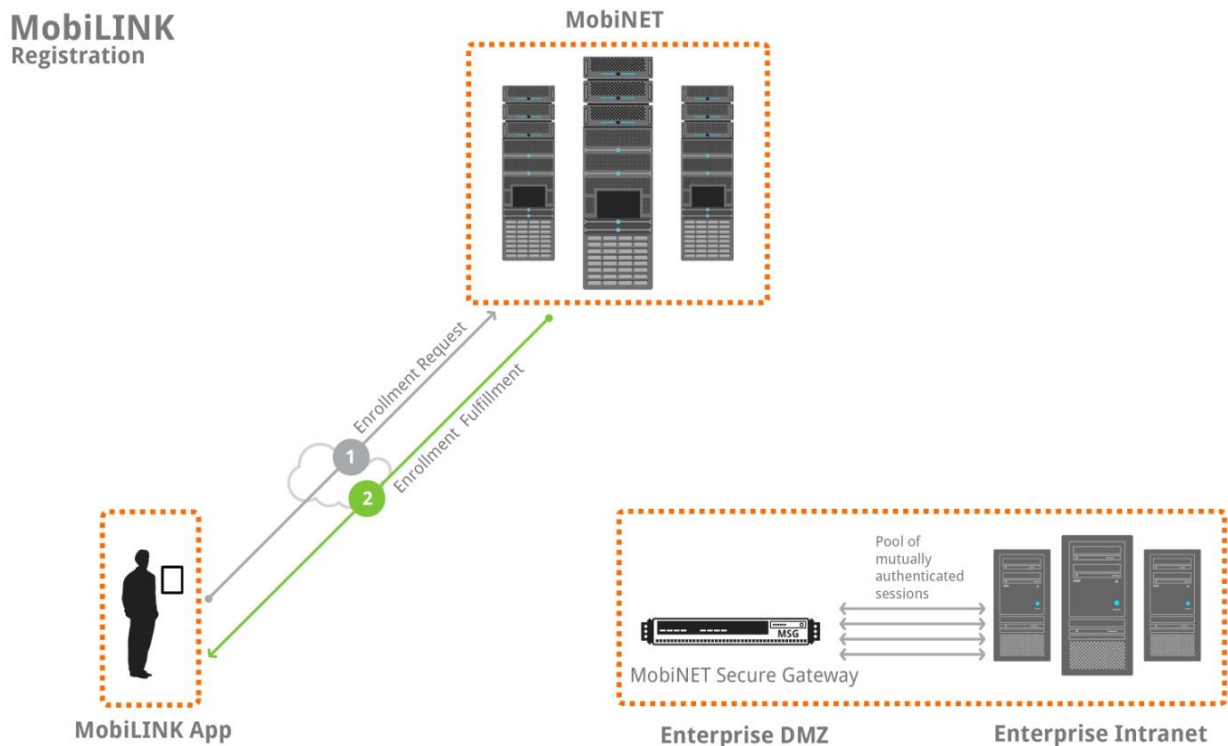
- The MobiNET generates a license key unique to a device and enterprise applications.
- The user launches the MobiLINK application from the device.
- The user creates their password and enters their license key.
- MobiLINK generates unique cryptographic credentials for the user and submits a request to the MobiNET for an authentication certificate.
- The MobiNET returns to MobiLINK signed X.509 certificates.
- MobiLINK securely stores the password-protected certificate and cryptographic credentials.

Security Compliances	
• Individual specific certificate-based technology • Secure delivery of certificate to the device • Multi-factor authentication • Mutually authenticated TLS 1.1 connection • 256-bit AES encryption • RSA SHA-1 and SHA-2 signing algorithms • Zero foot print on the Remote asset • Internal URLs are not exposed to the internet and are not visible to the user	• The MobiLINK browser is sandboxed, creating a secure workspace not exposed to the user's other internet browsing activities • The user's credentials and certificate are not available to other applications, the operating system or other devices • PKI based solution • Route1 has no ability to see into the user's secure connection

MobiNET

The MobiNET is a universal identity management and service delivery platform that confirms the identities of individual users and their entitlement to access specific applications, data or resources. It is driven by the identity of the person, not the remote device they are using. Consistent and accurate identification of the individual or the entity significantly reduces the burden of securing access. Since authentication is inherently addressed by the MobiNET platform, IT managers can focus instead on what individuals are authorized to access – where they can go within the network and what they can do there. Organizations can ensure the integrity of their data, and authorize and facilitate secure connections between individuals and their digital resources from anywhere in the world.

The MobiNET platform combines the strength of a PKI technology with the trust and flexibility of multi-factor authentication, meeting the stringent security mandates and policies established by governments, defense organizations and commercial enterprises.

> **Patented Technology:** *"System and Method for Accessing Host Computer via Remote Computer"* (U.S. Patent 7,814,216 – October 12, 2010) - In a peer-to-peer fashion, various host computers communicate with various remote computers using the internet so that user inputs from the remote computers are transferred to the host computers as if the user inputs occurred locally, and information generated by the host computers is displayed on the remote computers. Thus, a remote computer is able to access all of the information and application programs on the host computer.

DEFIMNET

DEFIMNET is universal identity management and service delivery platform designed to reside within all levels of classified and unclassified networks. It works with other command and control network systems to enforce confidentiality, integrity and availability of information. It enables consistent information assurance across commands, services, agencies, platforms and systems.

Organizations install Route1's DEFIMNET platform into their existing IT infrastructure. While developed from the MobiNET platform, it differs in that all authentications, access management, certificate distribution and connection facilitation takes place *within* the organization's network.

MobiNET Secure Gateway

The MobiNET Secure Gateway (MSG) is an "dumb" appliance that sits in the enterprise's DMZ and acts as the gatekeeper when a user attempts to access an enterprise application. The MSG validates with the MobiNET to confirm whether the user is entitled to access the enterprise application they are requesting a secure connection with. Upon receiving a positive response from the MobiNET, the MSG establishes a mutually aunthenticated TLS 1.1 session and permits the user access to the enterprise applications. If a positive response is NOT received, the MSG terminates the connection request.

Deployment

	MobiNET	DEFIMNET
MobiLINK application software	Required	Required
MobiNET Secure Gateway	Required	Included