Agenda Key: 23FK

Session #: 570493

Going Mobile with Notes and Domino

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Amy Hoerle - Introduction

- 1st "real" job was as an AS/400 administrator in 1997
- Worked on IBM Lotus Domino support team for 11 ½ years
- Specializing in Lotus products on IBM i & Windows since 1999
 - Installing, configuring, tuning, debugging and troubleshooting
- DAOS expert
- Xpages development
- Author of numerous technotes, articles and the "Optimizing Domino Administration" IBM Redbooks Wiki
- Blog: www.bleedyellow.com/blogs/ilotusdomino
- Twitter: iLotusDomino



Kim Greene - Introduction

- Owner of Kim Greene Consulting, Inc.
- Extensive iSeries background
- Services offered include:
 - System and application performance optimization
 - Administration
 - Upgrades
 - Troubleshooting
 - Health, performance, security, etc. checks
 - Migrations
 - Custom development
 - Enterprise integration
- Technical writer for Systems Magazine, IBM i Edition
- Blog: www.bleedyellow.com/blogs/dominodiva
- Twitter: iSeriesDomino



Agenda

- Getting started with Traveler
- Planning
- Traveler 8.5.3
- Security
- Managing Traveler
- Customizing Traveler
- When you need more than mail
 - Other applications your users may want/need



What is Lotus Notes Traveler?

- Server that provides real-time synchronization to mobile devices
 - Mail
 - Contacts
 - Calendar
 - Notebook entries (Windows Mobile & Nokia)
- Data accessed from the server
 - Company Directory
 - Secondary Directories (requires directory assistance configured on the Traveler server)



Devices supported by Lotus Traveler

Device Family	Supported Devices
Android	Android 2.x 3.x*. 4.x**
Apple	iPad iPhone (OS2 or higher) iPod (3G or higher)
Nokia	Nokia Series 60 – 3 rd and 5 th edition Symbian3
Microsoft	Windows Mobile 6.x

*Android 3.x requires Lotus Traveler 8.5.2.2 or above **Android 4.x requires Lotus Traveler 8.5.3.2

Detailed device list: http://www-01.ibm.com/support/docview.wss?uid=swg27022506



Installing Traveler

- Install Domino
 - Install Domino 8.5.3 & 8.5.3 FP1
- Configure Domino Server
 - Configure Directory Assistance (if required)
 - Create required connection documents for replication
 - Configure SSL
 - Configure session authentication (Single or multi-server)
 - Test HTTP connectivity
- Install Traveler
 - Configure Traveler default device settings and/or policies



Accessing the traveler servlet from a browser



User Status (Amy Hoerle/Kim Greene Consulting)

Lotus Notes Traveler server is available.

SPH-D700: Online and no sync requests from the server are pending.

Configure your Device

Your device could not be automatically identified, so you need to download IBM Lotus Mobile Installer for your Nokia Series 60 (Symbian OS),

Touch/iPad device.

Select an IBM Lotus Mobile Installer.

Generate an Apple Profile.

Lotus. Traveler IBM.

Manage Security

Manage security for the user's devices.

Nokia Series 60 (Symbian OS)

Windows Mobile 6.0/6.1/6.5

Download IBM Lotus Mobile Installer

Manage the Notes ID

Your Notes ID, a file that your administrator creates, allows you to encrypt, decrypt, a Android

Report a Problem

Report a problem with Lotus Notes Traveler to your server administrator.



Configuring the Device / Installing Traveler

Tip: Upgrade the firmware of the device before you start

• Installing on an Apple Device:

```
http://www-10.lotus.com/ldd/dominowiki.nsf/dx/
Demo_Installing_Lotus_Notes_Traveler_on_Apple_devices
```

• Installing on an Android Device:

```
http://www-10.lotus.com/ldd/dominowiki.nsf/dx/
Video_Installing_IBM_Lotus_Notes_Traveler_on_your_Android_device
```

• Installing on a Windows Mobile Device:

http://www-10.lotus.com/ldd/dominowiki.nsf/dx/ installing-lotus-notes-traveler-on-a-windows-mobile-device

• Installing on a Nokia Device:

http://www.youtube.com/watch?v=YQnpmZHzn5k

Traveler 8.5.3



Apple Traveler Enhancements

- 8.5.3
 - Apple iOS partial wipe of traveler only
 - Group name and Mail-in database lookup
 - Select which applications are allowed to sync to Apple devices
 - Reply and Forward indicators from Apple devices
- 8.5.3.1 & iOS 5
 - Ability to create, rename, move and delete mail from folders
 - Requires AS_ALLOW_DS_FOLDER_CHANGES set to true in NTSConfig.xml
 - Follow up flags



Android Traveler Enhancements

- 8.5.3
 - Home Page widgets for mail and calendar
 - Invite, creation, quick switch days/weeks, week view hints
 - Copy/paste & send button when composing messages
 - Android OS 3.x support
 - Android OS 4.x support (8.5.3.2)
- Nokia Symbian 3 support



Upgrading to 8.5.3

- Simple to upgrade the server
 - Traveler will defrag during the process
- The 8.5.2 Traveler application on the client will be removed and replaced (data will be replaced)
 - Installer can now perform automatic updates

Company Mobile Policies



Planning A Company Mobile Policy

- What to include in a Mobile policy
 - Company devices or Bring Your Own Device (BYOD)
 - Agree to secure devices
 - Agree to remote wipe
 - Anti-virus





1. Purpose

The purpose of this policy is to help you understand how mobile devices should be used at XYZ. It applies to:

- Laptops;
- Tablets (e.g. iPads);
- Mobile/cellular phones;
- PDAs;
- Any other mobile device capable of storing corporate data. We'll refer to these devices as "mobile devices." This policy applies to any mobile device connected to the XYZ network, whether it's owned by XYZ or the employee. The goal of this policy is to protect XYZ's data, and to set out our expectations of employees who access that data from mobile devices.

2. Relation to Other Policies

This document is not intended to replace the Electronic Media Systems policy or the Overtime policy. We have just put everything relating to the use of mobile devices together into this one handy document.

3. Access

Before you can access XYZ data on your mobile device, you need to register it with the IT Department. If you do anything that puts XYZdata at risk, the IT Department may turn off your access to the network without notice.



4. Security

The IT department sets standards for passwords, encryption and other security measures. You must agree to abide by these standards in order to access corporate data from your device. Any jailbroken device needs special permission in writing from the head of the employee's region to be allowed to access the XYZ network..

5. Loss or Theft of Mobile Devices

If your mobile device is lost or stolen, you must immediately tell your manager as well as your local IT manager. IT staff will remotely wipe the data on the mobile device as soon as possible and within 8 hours at the most. If you bring a personal mobile device to the office or on a business trip, XYZ is not liable if you lose it or if it is damaged or stolen.

6. Loss of Data

If your mobile device is lost or stolen and data is wiped, XYZ can't guarantee to preserve your personal data such as photographs, music, address book contacts or applications that you have downloaded. XYZ is not responsible for backing up your personal data. It is your responsibility to back up any personal data on your mobile device.



7. Reimbursement

Because of the nature of their work, certain employees are entitled to reimbursement of specified fees for their personal mobile devices. For those employees, XYZ will reimburse them as follows:

Purchase of a mobile device (Android, iPhone or Blackberry smartphones or iPad tablets):

NALA: 50% of the cost of the device, up to a maximum purchase price of \$1,000

EMEA: 50% of the cost of the device, up to a maximum purchase price of 1,000 euros

APAC: 50% of the cost of the device, up to a maximum purchase price of JPY100,000

Monthly voice/data charges:

All Regions: 50% of the monthly voice tariff fixed cost and 50% of the monthly data tariff fixed cost, or 50% of a combined voice + data tariff fixed cost In addition, XYZwill reimburse 100% of any qualifying business-related charges that are additional to the fixed monthly cost (these need to be separately identified from fixed costs in your expenses claim). Qualifying charges include:

• Business-related international roaming mobile calls (please use Skype over WiFi though, if it's convenient and if you can get good enough quality, it's cheaper)



- Business-related normal international mobile calls (please use Skype over WiFi though, if you can, it's cheaper)
- 50% of data roaming charges (please use public or private WiFi in preference to data roaming, if you can find it, it's a LOT cheaper!) Qualifying charges don't include:
- Premium rate numbers
- Premium SMS services
- Personal international calls

The maximum number of devices per employee (e.g. Android phone + iPad) will be determined by your manager based on your job role. Reimbursement for these charges must be approved in advance by your manager and, for recurring charges, must be submitted on a monthly basis using XYZ's expense reimbursement procedures. XYZ may change these reimbursement amounts at any time.

The mobile devices covered by this reimbursement policy are and remain your personal property. XYZ carries no responsibility for repairing or replacing these devices if lost, damaged or stolen at any time. If you leave the company for any reason, XYZ's obligation to reimburse you as specified above will end on the last day of your employment. If you leave in the middle of a month, you will be paid pro-rata for that month up until the day you leave. If you leave the company within 3 months of purchasing and being reimbursed for a new device, then you agree to repay XYZ the full amount of the reimbursement. If you leave the company, XYZ Company will remove all company data from the device. Out-of-hours contact information for local IT managers is available in the XYZ Phone Directory.

Security



Security Considerations

- Network location of Traveler server
 - In DMZ
 - Require VPN Access?
- Will device access be via HTTP or HTTPS (SSL)
- Is this Domino server available from the Internet?
 - Don't let changes to names.nsf replicate into the environment
 - Which databases can anonymous access?



Lotus Mobile Connect

VPN solution for mobile devices

- Supported across networks so application is not interrupted when switching networks (for example, WiFi to 3G)
- Integrates with Traveler
- For more details:

http://www.ibm.com/software/lotus/products/mobileconnect/



SSL

- It is strongly recommended to use SSL when implementing your Traveler server
 - Just want to pilot Traveler? Use a self-signed certificate
- What if you change your mind?
 - User must manually update the configuration on their device



Traveler Server Security

- Can anyone register a device on the server?
- How many devices is each user allowed to use?
- What to know about device and data security
- Will passwords be required on the device?



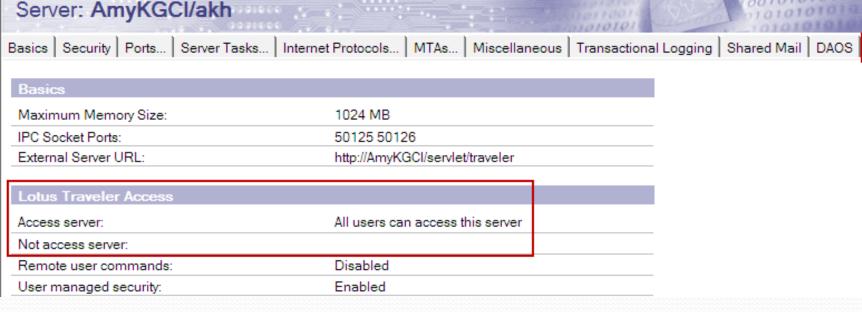
Device Security Capabilities at 8.5.3

	Apple iOS 3.x and higher	Android 2.0.1 and higher	Nokia Symbian	Windows Mobile 6.x
Connect via HTTPS	Yes	Yes	Yes	Yes
Read/Compose encrypted mail	Yes with Traveler Companion	Yes	Yes	Yes
Remote Wipe (Full or Traveler only)	Yes	Yes	Yes	Yes
Data stored encrypted on device	Yes	Yes	Yes	No
Allow/deny access based on password	Yes	Yes	Yes	Yes



Restricting access to Traveler

- Ways to restrict access
 - By user
 - By requiring approval for each device accessing traveler
 - By device type



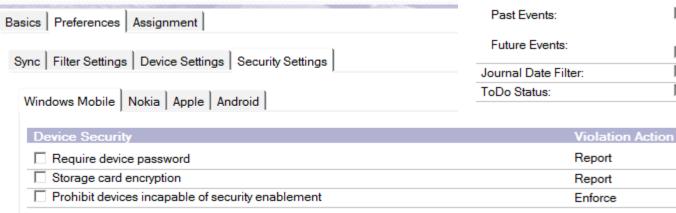
Lotus Traveler



Setting Default Device Settings:

- Open Domino Administrator
- Messaging → Mail Tab
- IBM Lotus Traveler → Device Settings

Note: Only 1 default document for the Traveler server

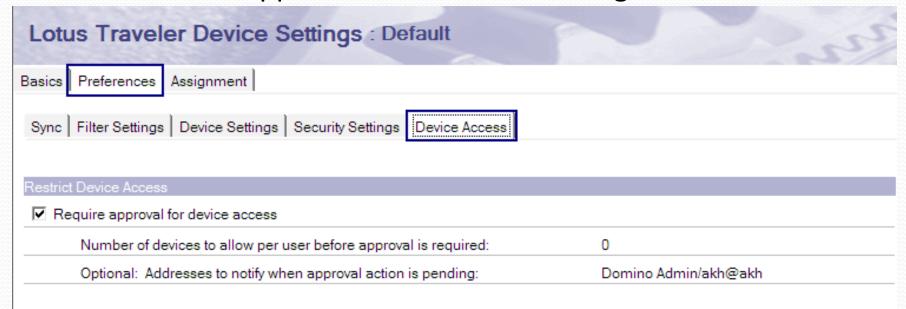


Lotus Havelet Device	e Seurigs . Delauit			
Basics Preferences Assignment				
Sync Filter Settings Device Settings Security Settings				
Mail Filters:				
Email Body Truncation:	✓ Enabled 『5K』▼			
Maximum Email Attachment Size Allowed - Administrator	[™] 4000			
Email Attachments:	☐ Enabled			
Email Attachment Size:	「100」▼ KB			
Email Date Filter:	✓ Enabled 「5 Days」▼			
Email Importance:	☐ High Importance Only			
Other Filters				
Calendar Date Filter:				
Past Events:	▼ Enabled 『1 Week』▼			
Future Events:	▼ Enabled 『3 Months』▼			
Journal Date Filter:	▼ Enabled 『1 Week』▼			
ToDo Status:	✓ Incomplete Status Only			

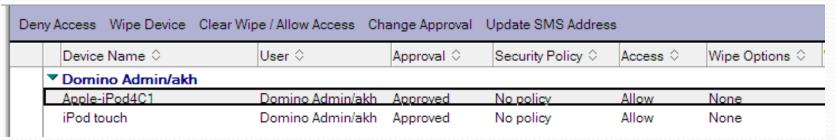


Approving Devices

Force device approval in the Device settings document



Approve Devices in the Traveler Database





The Approval Process

- User connects to Traveler web page to configure profile or install Traveler application
- After install mail messages are sent to:
 - The user notifying them a device is waiting to be approved
 - The administrator notifying them a device is pending approval
- The Administrator then approves the device
- The User receives an e-mail that the device has been approved
- Data begins to sync to the device



The Approval Process - Example

User Domino Admin/akh has registered the following device with the Lotus Notes Traveler server AmyKGCI/akh.

The device will be unable to sync data until approved by a Lotus Notes Traveler Administrator.

Device access can by approved or denied in the Lotus Traveler administration database.



User ID	Domino Admin/akh
Server	AmyKGCI/akh
Device ID	CIKNTD-136E7083E89-I-099FB479-F26F-48E7-9A8B-FC94A89145B6
Device Name	Cikado - NotesF1 To Do Free 1.5.2 (Apple-iPhone 5.1)
Device Type	Cikado - NotesF1 To Do Free 1.5.2 (Apple-iPhone 5.1) (OS 3)

Lotus Notes Traveler product documentation: http://www.lotus.com/ldd/dominowiki.nsf/xpViewCategories.xsp?lookupName=Product%20Documentation

Message auto sent by the Lotus Notes Traveler server AmyKGCI/akh.



The Approval Process - Example



Device access approved for Domino Admin/akh on Lotus Notes Traveler server AmyKGCl/akh.

Domino Admin to: Domino Admin

Device access has been approved by a System Administrator.

The following device will now be able to sync with the Lotus Traveler server AmyKGCI/akh.

User ID	Domino Admin/akh
Server	AmyKGCI/akh
Device ID	CIKNTD-136E7083E89-I-099FB479-F26F-48E7-9A8B-FC94A89145B6
Device Name	iPod touch
Device Type	iphone/5.1
Client Level	8.5.2.1.201011181900

Lotus Notes Traveler product documentation:

http://www.lotus.com/ldd/dominowiki.nsf/xpViewCategories.xsp?lookupName=Product%20Documentation

Message auto sent by the Lotus Notes Traveler server AmyKGCI/akh.



Restricting Device Types by Customizing NTSConfig.xml

- **AS_PROTOCOL_VERSIONS**: specifies the ActiveSync Protocol versions that the server supports (choices are 2.5, 12.0, 12.1).
 - For example, to prohibit Apple 2.x devices specify:
 <PROPERTY NAME="AS_PROTOCOL_VERSIONS" VALUE="12.0,12.1"/>
- AS_PROVISION_EXEMPT_USER_AGENT_REGEX: devices that are exempt from using the ActiveSync Provision command
 - Provision command required to enforce security and allow remote wipe (Default is that none are exempt)
- ALLOWED_USER_AGENT_REGEX: The User-Agent HTTP headers that are allowed to sync data
 - For example, to allow only Apple and Android specify:
 <PROPERTY NAME="ALLOWED_USER_AGENT_REGEX" VALUE="(Lotus Traveler Android)|(Apple)"/>



Traveler device settings & policies

- Use to override the defaults
 - Executive team does not need to go through device approval?
- Settings you may want to enable
 - Attachment synchronization
 - Increasing the Email Body Truncation size
- Settings you may not want to enable
 - Wiping the device after X incorrect password attempts
 - Email Importance



Example Traveler Settings Document

Lotus Traveler Settings

Ba	sics Preferences Comments A	Administration					
Sync Filter Settings Device Settings Security Settings Device Access							
	Mail Filters:		How to apply this setting:	Inherit from parent policy:	Enforce in child policies		
	Email Body Truncation:	▼ Enabled 『100K』▼	Don't set value ▼	☐ Inherit	Enforce		
	Maximum Email Attachment Size Allowed - Administrator	[₽] 4000』KB	☐ Don't set value	☐ Inherit	☐ Enforce		
	Email Attachments:	▽ Enabled	Don't set value ▼	☐ Inherit	☐ Enforce		
	Email Attachment Size:	『100』▼ KB	Don't set value ▼	☐ Inherit	☐ Enforce		
	Email Date Filter:	▼ Enabled 『1 Week』▼	Don't set value ▼	☐ Inherit	☐ Enforce		
	Email Importance:	High Importance Only	Don't set value ▼	☐ Inherit	☐ Enforce		
	Other Filters		How to apply this setting:	Inherit from parent policy:	Enforce in child policies		
	Calendar Date Filter:						
	Past Events:	▼ Enabled 『1 Week』▼	Don't set value ▼	☐ Inherit	☐ Enforce		
	Future Events:	▼ Enabled 『3 Months』▼	Don't set value ▼	☐ Inherit	☐ Enforce		
4							



Policy Settings vs. Device Settings

 The device settings will be used unless they will violate a server setting

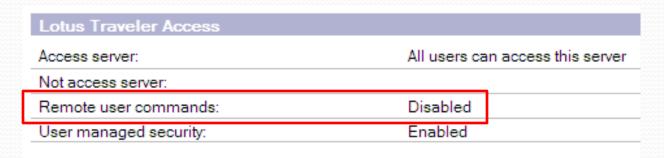
- Example:
 - Device sets the Date filter for mail to 1 month
 - Server sets the Date filter for mail to 1 week

Winner: The Server with 1 week



Removing Data from the Device

- Being able to remove data or "wipe" a device is critical
 - Lost or stolen device
 - Employee resignation or termination
- Wipe options
 - Full or Traveler only (requires 8.5.3 for some devices)
 - User or server initiated



User can only initiate a wipe if enabled in the server document, Traveler tab



User Initiated Wipe

https://mytravelerserver.com/servlet/traveler



User Status for Amy Hoerle/Kim Greene Consulting

Lotus Notes Traveler server is available.

Apple-iPod4C1: Online and no sync requests from the server are pending.

Samsung SPH-D700: Online and no sync requests from the server are pending.

Configure your Device

Your device could not be automatically identified, so you need to download IBM Lotus Mobile Installer or IBM Lotus Notes Traveler

Download IBM Lotus Notes Traveler for Android.

Download IBM Lotus Mobile Installer for Nokia Symbian^3/Series 60.

Download IBM Lotus Mobile Installer for Windows Mobile 6.0/6.1/6.5.

Generate an Apple Profile.

Manage Security

Manage security for the user's devices.

Manage Security for Amy Hoerle/Kim Greene Consulting

Device: Apple-iPod4C1 which has Device ID ApplC3LH1K9HDNQW

Status

No security actions are pending.

Request Security Action

<u>Wipe Device</u> - Resets the device to the factory default state by erasing everything on the device and prevents the device from synchronizing with the server. <u>Wipe Application</u> - Erases all Lotus Notes Traveler client software and data on the device and prevents the device from synchronizing with the server. <u>Deny Access</u> - Prevents the device from synchronizing with the server.

Device: Samsung SPH-D700 which has Device ID Android_57a7a27d46bdaf84

Status

No security actions are pending.

Request Security Action

Wipe Device and Storage Card - Resets the device to the factory default state by erasing everything on the device, erases everything on the storage card, and provent Wipe Application and Storage Card - Erases all Lotus Notes Traveler client software and data on the device, erases everything on the storage card, and prevent Wipe Device - Resets the device to the factory default state by erasing everything on the device and prevents the device from synchronizing with the server.

Wipe Application - Erases all Lotus Notes Traveler client software and data on the device and prevents the device from synchronizing with the server.

Wipe Storage Card - Erases everything on the storage card and prevents the device from synchronizing with the server.

Deny Access - Prevents the device from synchronizing with the server.

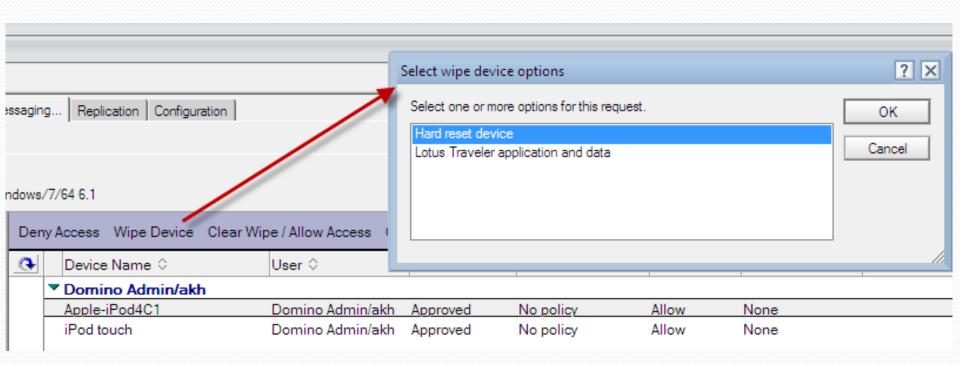
Last updated: Friday, May 4, 2012 10:40:14 AM EDT

Lotus Notes Traveler Version: 8.5.3.0 Build 201109131037 running on



Administrator Initiated Wipe

Domino Administrator, Messaging -> Mail tab IBM Lotus Notes Traveler -> Device Security





Sending/Receiving Encrypted Mail

- Sending and receiving encrypted mail can be done just as it is today on the Notes client!
 - Can be done within the mail application on Android
 - Requires Traveler Companion app on Apple devices
- Requires the Notes.id be imported into the user's mail file
 - Can be pulled from the ID Vault
 - Be aware the vault download settings
 - Failed to authenticate with server AmyKGCI/akh: This server does not have the vault. A referral was returned.
 - Server domserver1/akh reported the following problem causing authentication to fail: ID in vault has download count of zero



Traveler Companion

- Requires Server Configuration Update
 - Edit NTSConfig.xml on the Traveler server
 and add the following into the TrueSyncServer section

<PROPERTY NAME="TSS_APPLE_ENCRYPT_ENABLED" VALUE="true"/>

 Ensure the external host URL is entered correctly in the Traveler server document

https://mytravelerserver.mycompany.com/servlet/traveler

Restart the Traveler server



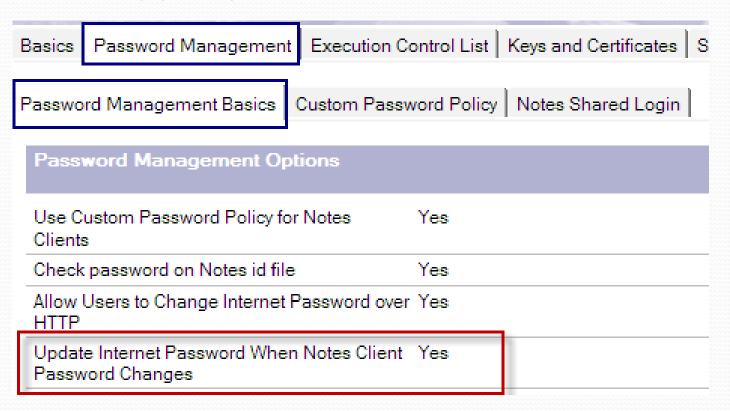


- Users must manually update their passwords on the device
- How can you minimize the pain for your users?



Managing Passwords

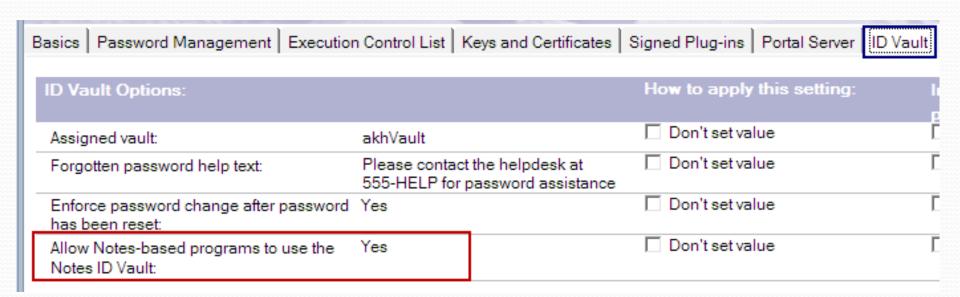
 Synchronize Notes.id password with internet password via a security policy





Managing Passwords

 Use ID Vault to synchronize the password for the notes.id stored in the mail file





Attachment security

- Do you want to allow users to download encrypted attachments to the device where they may no longer be encrypted?
- If not, disable with the notes.ini setting:
 TS_COMPANION_POLICY= noexport
- Encryption of attachments or mail data in the Traveler application
 - Refer to the device settings policy document
 - Always encrypted by Android, optionally encrypted on other devices



Remote User Commands

• What does it give you?

User Commands for Domino Admin/akh

Show - Display all the information for a user and the user's devices

Dump - Dump the information for a user to a file on the server

Device Commands

Device: Apple-iPod4C1 which has Device ID ApplC3LH1K9HDNQW

Delete - Delete the Lotus Traveler data for the device

Reset - Force a sync reset for the device

Stop Sync - Stops any active syncs for the device

- Optionally enabled via the Server document
 - Recommended to leave this setting disabled

Managing Traveler



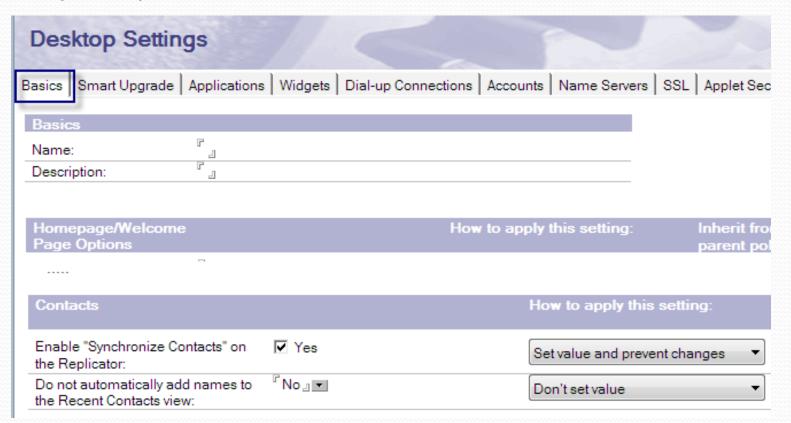
Traveler Releases

- Staying current is important!
 - New devices, new features...
- 8.5.2 Released August 2010
 - 8.5.2.1 December 2010, support for Android 2.0.1+
 - 8.5.2.2 March 2011, support for Android 3.0
 - 8.5.2.3 June 2011, support for iOS partial wipe
 - 8.5.2.4 October 2011, database defrag support
- 8.5.3 Released October 2011
 - 8.5.3.1 November 2011, support for iOS5
 - 8.5.3.2 February 2012, support for Android 4.0



Synchronizing Contacts

 Make sure the user's contacts get to their device (before they call you!)





Basic Traveler Commands

- Invoking Traveler command help tell traveler help
- Starting the Traveler server
 load traveler
- Stopping the Lotus Traveler server

tell traveler shutdown

Waits for any pending syncs to complete

tell traveler quit

- Ends immediately
- Restarting the Traveler server restart task traveler



Basic Traveler Commands

- View information for a specific user
 tell traveler show firstname lastname
- Display users currently synchronizing with the server tell traveler showActive
- Show number and list of registered users tell traveler showUsers
- Show Lotus Traveler server statistics
 tell traveler stat show
- Display status of all users and devices tell traveler security allstatus



Example

tell traveler show HTC Thunderbolt

Lotus Traveler has validated that it can access the database mail/hthunder.nsf.

Encrypting, decrypting and signing messages are enabled because the Notes ID is in the mail file or the ID vault.

Canonical Name: CN=HTC Thunderbolt/O=KGCI Internet Address: HThunderbolt@kimgreene.com

Mail Server (Home): CN=Mail1/O=KGCI Mail File (Home): mail/hthunder.nsf

Mail Server (Current): CN=Mail1/O=KGCI Release 8.5.2FP1

Mail File (Current): mail/hthunder.nsf

Mail File Replicas: [CN=Mail1/O=KGCI, mail/hthunder.nsf]

Notes ID: Mail File does not contain the Notes ID.

Auto Sync User State: Online

Last Prime Synchronization: Wednesday, August 17, 2011 1:55:58 PM EDT

Banned Documents: 0

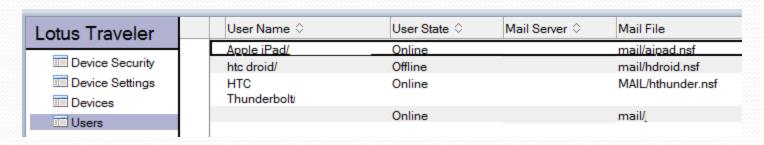
Devices:

Device ID: Android_d3d8f5322bd41ab8
Device Description: DROID X2:2.3.3:1.0.0.1



Removing a Traveler User

Deleting a Traveler user
 tell traveler delete * username
 tell traveler security delete * username



- Note: Do not delete documents directly from the traveler database (LotusTraveler.nsf).
- Note: Users automatically removed after 30 days without a sync request.



Data Usage (new for 8.5.3.2)

Remote console command issued by Amy Hoerle/Kim Greene Consulting: tell traveler dbusage

tell traveler dbusage

Lotus Traveler Database Statistics

Accounts : 1 Devices : 2

Device documents: 94 Domino documents: 48

Highest Total Usage Documents Percentage

Domino Admin/akh 48 100.00

Mail documents: 40

Highest Mail usage Documents Percentage EMail filter

Domino Admin/akh 40 100.00 unlimited

Calendar documents: 0 Contacts documents: 0 To Do documents: 2

Highest To Do usage Documents Percentage Task filter

Domino Admin/akh 2 100.00 incomplete only

Notebook documents: 0

Folder documents: 4

Highest Folder usage Documents Percentage Folder filter

Domino Admin/akh 4 100.00 unlimited

Command DbUsage complete.



Traveler Performance

- Memory
 - NSF_BUFFER_POOL_SIZE_MB=256
- Threads
 - HTTP threads = # of devices X 1.2
- Authentication
 - Enable session authentication
 - Prevents authentication for every device to server communication
 - Could cause install problems on the device

www-10.lotus.com/ldd/dominowiki.nsf/dx/Lotus_Notes_Traveler_and_Domino_Session_Authentication www-10.lotus.com/ldd/dominowiki.nsf/dx/Tuning_performance_of_the_server_LNT8521



Derby Database Defrag

- Over time Traveler performance can deteriorate
 - Defrag the Derby database to restore performance
- Steps to start a Defrag:
 - Tell traveler shutdown
 - Tell http quit
 - Load traveler -defrag





Traveler Defrag Enhancement

- Requires Traveler 8.5.2.4 or 8.5.3.1
- New Notes.ini parameters
 - NTS_DEFRAG_INTERVAL_DAYS=<# of days>
 - NTS_LAST_DEFRAG=<timestamp of last defrag>
- Defrag will automatically run if NTF_LAST_DEFRAG doesn't exist or if the # days past the last run is greater than the defined interval
- Defrag a minimum of every 30 days for optimal traveler server performance



Multiple Traveler Servers?

- Be aware of the Map databases
 - Always created with the same replica ID
- Why do you care?
 - Mapping databases are used to customize mapping for contacts
 - Useful for custom user directories
 - Pick the correct field (For example: email instead of MailAddress)

http://www-10.lotus.com/ldd/dominowiki.nsf/dx/08252009121253PMWEBM24.htm



Troubleshooting

- Oops while trying to modify Traveler configuration?
 - Rename NTSConfig.xml
 - Restart server and a new file will be automatically created
- Need to send data to IBM?
 - tell traveler pmr <pmr_number> [log file list]
 - performs a systemdump
 - collects the requested log files into an archive
 - uploads them to IBM support

Customizing Traveler



Corporate Lookup Options

- Finding contacts from Domino Directory or other secondary directories (configured via Directory assistance)
- Note: The lookup application is not automatically used by the phone for caller id purposes when phone rings
 - This is a limitation of the mobile OS
 - Only local contacts are searched



Corporate Lookup Customizations

- Where should lookups be done
 - Prior to 8.5.3 it was always the Traveler server
 - At 8.5.3, lookups are performed on the user's mail server
 - Revert back to Traveler with Notes.ini setting of
 - NTS_TRAVELER_AS_LOOKUP_SERVER=true
- Lookup should be done as who?
 - By default will be completed as the server
 - If restricting access to some directories, switch to user based lookups with Notes.ini setting of
 - NTS_LOOKUP_ENFORCE_ACL=1



Folder Management for iOS devices!

- Create, rename, move and delete folders!!
- Not enabled by default
 - New to 8.5.3.1
- Modify TrueSyncServer section of NTSConfig.xml
 - AS_ALLOW_DS_FOLDER_CHANGES = true
- **Only works when the device is on-line (No off-line support for folder operations)



Anti-virus / Outbox

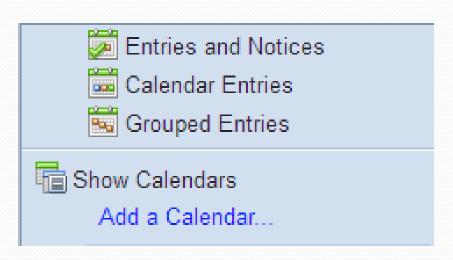
- Do all outbound emails need to be delivered to a gateway server?
- Do you need to run anti-virus on all outbound mail?
- Force traveler to send mail to a specific gateway or antivirus server rather than directly to the mail server
 - TrueSyncServer section of NTSConfig.xml
 - OUTBOX_MAIL_SERVERS
 - Value = server1/akh, server2/akh

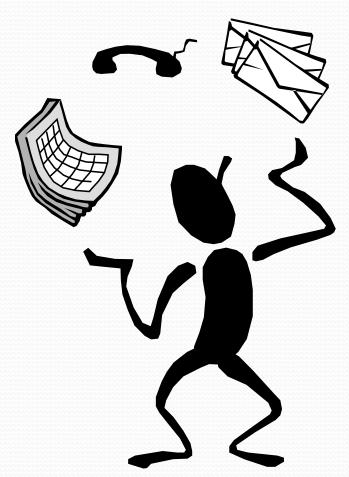
When you need More than Mail

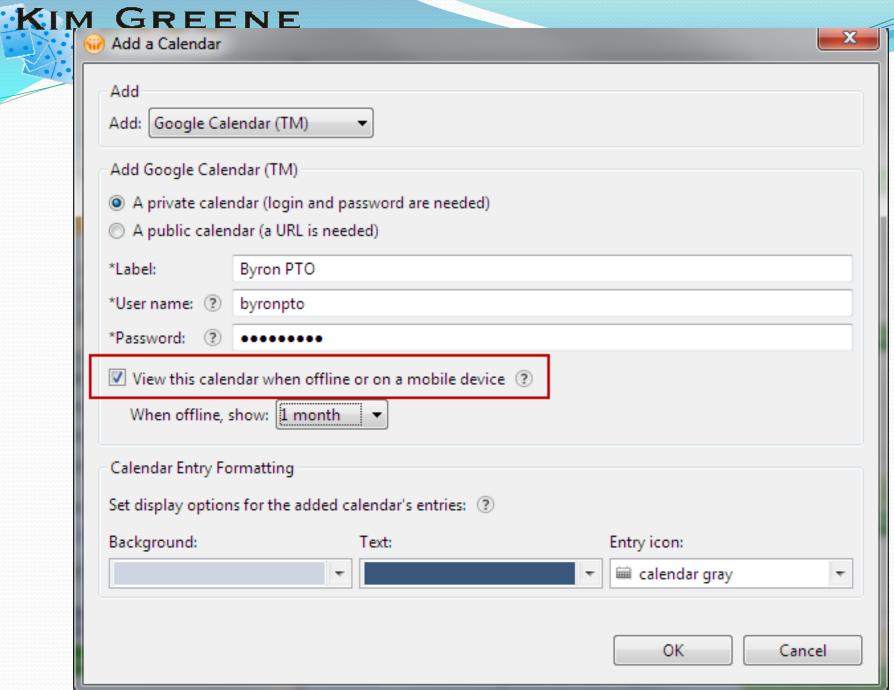


What's on your calendar?

- Personal calendar, work calendar, sports calendar, ...
- Bring them together and optionally on your device!









To Dos

- Not available yet for Apple or Android devices
- 3rd Party option available
 - NotesF1 To Do
 - Apple and Android devices



Free and Paid versions available



Journal/Notebook synchronization

- No option for Android Devices
- Notesbook app for Apple Devices
 - \$5.99, product by YouAtNotes



- Synchronizes Journal entries to the device
 - Journal must be available on the server!



Out of Office

- Out of Office functionality currently not supported with Traveler
- 3rd party option available for iPhone
 - http://www.extracomm.com/TravelerOOO
- Requires server side component which you must purchase
 - Also provides Out of Office management to the browser
 - Allows other users to enable Out of Office for another employee



Dealing with Notes document links

- Document links do not work with Traveler and are stripped out by the Traveler server
- Can optionally be sent to the device with the notes.ini:
 - DominoHTMLOptions=OfferNotesURLInLink=1
- iDocLink app provides a way to map a Domino server name to a hostname
 - Will allow access to documents for any web enabled Domino application
 - \$2.99 to purchase in the App Store
 - Not available for Android devices





Offline access to Notes Applications

- XPages applications can be replicated to a mobile device using Team Studio's Unplugged
 - Unplugged server is a chargeable feature
 - Not all XPages controls are supported
 - Still need an application that is suitable for a mobile device
 - Cannot be used with iDocLink
 - Supported on Blackberry, Apple and Android devices





Allowing other apps to connect to Traveler

- If its out there, a user will find it!!
- Can the app connect?
 - ALLOWED_USER_AGENT_REGEX in NTSConfig.xml allows the user agent
 - If you approve the device for that application when requiring approval for device access
 - Each application is different
 - May not specify a different user agent or device id
 - May access Traveler without you as the admin aware!



Managing your Mobile Devices

- Are there standard applications you want to deploy?
- Are there applications you need to prohibit?
- You need Mobile Device Management (MDM)
 - Air Watch
 - IBM Endpoint Manager
 - Mobile Iron



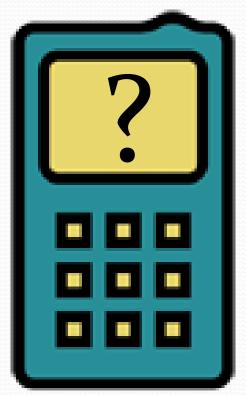






Questions

Thank you for attending



Please fill out your session evaluations.

Appendix

Detailed steps to install Traveler in your Domino Domain



Server Requirements

- Domino Server (32 or 64 bit) running on
 - Windows 2003 or 2008
 - Red Hat Linux
 - SUSE Linux

- Minimum additional hardware requirements
 - 500MB Disk
 - 512MB RAM



Server Requirements

- Network connectivity
 - DMZ placement recommended
 - Requires high speed network
 - Port 80/443 must be available or open on the firewall
- Licensing
 - Included in Notes Messaging CAL and Enterprise CAL
 - Requires a Lotus Domino Server License



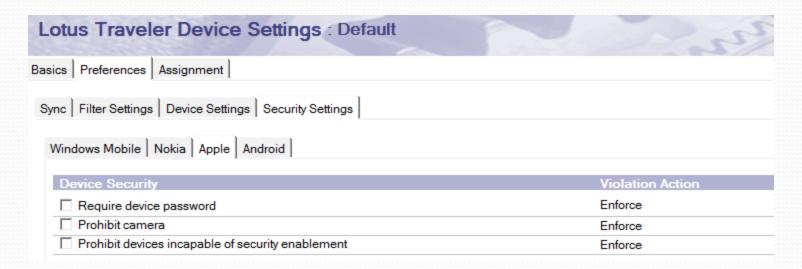
Domino Preparations

- Domino requirements:
 - Register an additional server
 http://www-10.lotus.com/ldd/dominowiki.nsf/dx/1.6 Expanding the Domino Domain
 - Domino Directory using 8.5.3 template version
 - Users must have an internet address and password specified in their person document
 - Review existing DA configuration
 - Traveler will perform directory lookups on the mail server unless default configuration is modified
 - Review existing mail server Security
 - New Traveler server must be able to access mail server
 - New Traveler server must have manager + delete access to mail files



Security Planning

- Decisions to make...
 - Require VPN into network to access or use SSL connection?
 - Use a self-signed certificate or purchase a 3rd party certificate?
 - Which users will be allowed to access?
 - Device password requirements?





- Install Operating System / prepare server
- Add host name to DNS
- Download the required code:
 - Domino 8.5.3
 - Domino 8.5.3 Fix Pack 1
 - Traveler 8.5.3
 - Traveler 8.5.3 Fix Pack 2



- Install Domino
 - Install Domino 8.5.3 & 8.5.3 FP1
- Configure Domino Server
 - Verify server starts properly
 - Configure Directory Assistance (if required)
 - Create required connection documents for replication
 - Configure SSL (if required)
 - Configure session authentication (Single or multi-server)
 - Test HTTP connectivity



- Install Traveler
 - End the Domino Server
 - Install Traveler 8.5.3
 - Install Traveler 8.5.3 Fix Pack 2



Required Connection Document(s)

- Pull From Hub/Mail/Administration server
 - Names.nsf
 - Secondary directory
 - Directory Assistance
- Pull-Push from Hub/Mail/Administration server
 - Admin4.nsf



Configuring SSL / Creating the Keyring

 Configuration done from a "Server Certificate Administration" application (csrv50.ntf template)







Step #1Create the keyring file

Create Key Ring

The first step in setting up SSL on a server is to create the key ring.

When the key ring is created, a public/private keypair is automatically generated and stored in the key ring.

Key Ring Inform		Quick Help
Key Ring File Name:	『keyfile.kyr』 _	Specify the name and password for the key ring
Key Ring	F****** _	file.
Password: Confirm Password:	***************************************	Note: You'll be referring to the key ring information you enter here in subsequent steps as you create and install certificates into the key ring.
Key Size		
Key Size:	[©] 2048▼	Key Size is the size of the public/private key pair in bits. The larger the key size, the greater the encryption strength.
Distinguished N	lame	
Common Name: Organization: Organizational Unit:	ீ traveler.kimgreene.com ு ீ Kim Greene Consulting, Inc. ு ீ ு (optional)	The Distinguished Name is the information about your site that will appear in any certificates you create.
City or Locality:	ீு (optional)	Note: Make sure the
State or Province:	™ Minnesota (no abbreviations)	Common Name matches
Country:	ிUSI (two character country code)	the URL of your site. Some browsers check the Common Name and the site URL, and do not allow a connection if they don't match.
Kim Greene Cons	Create Key Ring Sulting, Inc. All rights reserved worldwide.	



- Step #2a
 Create the certificate
 request
- Step #2b
 Work with
 vendor to
 obtain certificate

Create Server Certificate Request

A certificate is required for the public key in the key ring you created. To obtain a certificate, you create a certificate request, and provide it to a Certificate Authority for signing. Use this form to create the certificate request.

Note: Before proceeding you should read the documentation provided by the Certificate Authority you are using to see how they require the certificate request to be delivered.

Key Ring Inforr	mation	Quick Help
Key Ring File Name	ீkeyfile.kyr ௶	Specify the key ring file. Note: The key ring contains the Distinguished Name information that will be included in the certificate request.
Certificate Req	uest Information	
Log Certificate Request	[™] Yes	Log certificate requests for future reference. Note: Choose "View Certificate Request Log" in the main menu page to see a listing of all logged requests.
Method	Paste into form on CA's site Send to CA by e-mail	Choose how to submit the certificate request to the Certificate Authority. Note: The "Paste" method is recommended if it is supported by the Certificate Authority you are using.
	Create Certificate Request	



• Step #3
Install
Trusted
root
certificate
into your
keyring file

Install Trusted Root Certificate

Use this form to install the Certificate Authority Trusted Root certificate into the server key ring. If you haven't already done so, first obtain the Certificate Authority Trusted Root certificate by choosing "Accept This Authority In Your Server" from the main menu of Certificate Authority Web site. **Note:** This step of installing the Certificate Authority Trusted Root certificate into your server key ring is recommended before installing certificates signed by this Certificate Authority into the key ring.

Key Ring Inform	nation	Quick Help
Key Ring File Name	『keyfile.kyr』	Specify the key ring file.
Certificate Infor	mation	
Certificate Label	T	The identifier you'll see for this certificate when you choose "View & Edit Key Ring" from the main menu.
Certificate Source	○ File ⓒ Clipboard	The source of the certificate can be from a file or from the clipboard.
Certificate from Clipboard:		Paste clipboard contents into this field.
		certificate must include the "Begin Certificate" and "End Certificate" lines.
	Merge Trusted Root Certificate into Key Ring	



Step #4
 Install the certificate for your server

Install Certificate into Key Ring

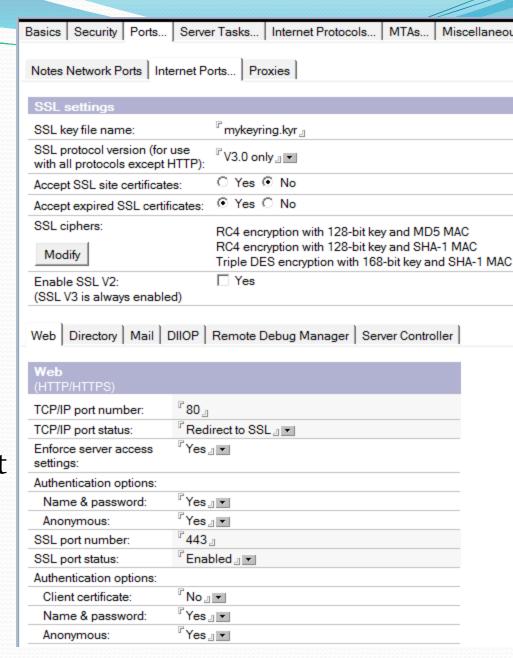
The Certificate Authority will notify when your signed certificate is ready. The specifics depend on the Certificate Authority, but typically you will receive an e-mail specifying a URL where you can pick up the certificate. Once you have obtained the signed certificate, this form lets you install it into your key ring. **Note**: Before installing this certificate, it is recommended that you install the certificate of the signing Certificate Authority in your key ring as a Trusted Root. If you haven't already done so, choose "Accept This Authority In Your Server" from the main menu of the Certificate Authority Web site to obtain the CA certificate.

Key Ring Information	Quick Help		
Key Ring File [□] keyfile.kyr <u>□</u> Name	Specify the key ring file.		
Certificate Information			
Certificate Source ○ File ○ Clipboard	The source of the certificate can be from a file or from the clipboard.		
Certificate from Clipboard:			
『Paste your certificate here』	Paste the clipboard contents into this field.		
	Note: The pasted certificate must include the "Begin Certificate" and "End Certificate" lines.		
Merge Certificate into Key Ring			



Configuring HTTP

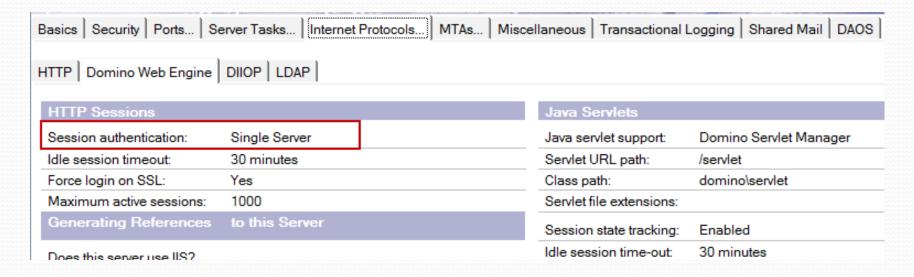
- Copy .kyr and .sth file to server
- Redirect to SSL
- Enforce Server access
- Enable SSL port
- Tip: Allow anonymous authentication to prevent some device authentication failures





Configuring HTTP (cont'd)

Enabling Session authentication





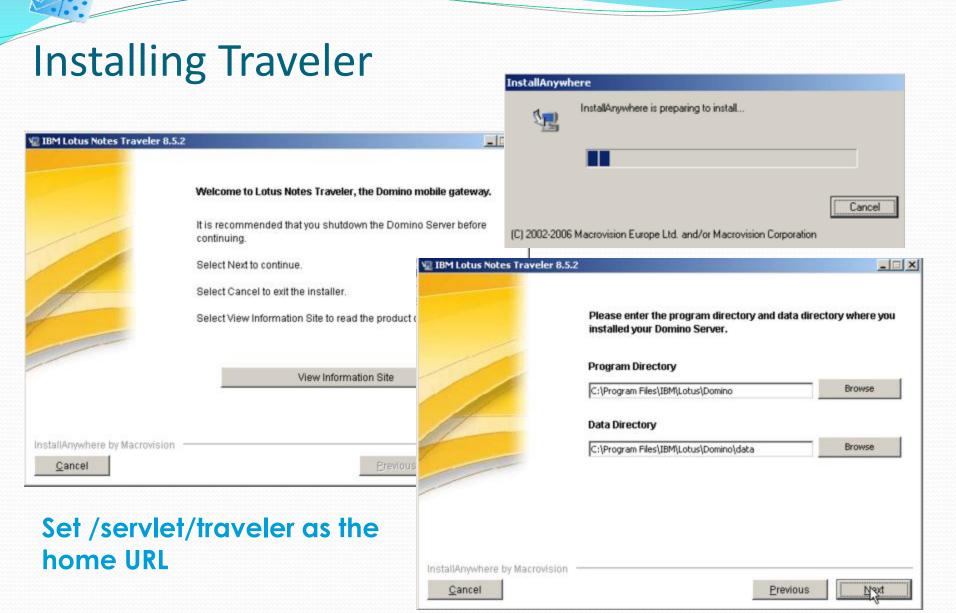
Testing

- Test accessing via HTTP
 - http://traveler.kimgreene.com/names.nsf
 - Do you get redirected to SSL?
 - Can you log in?
- Verify Directory Assistance
 - "Show xdir" console command

DomainName	DirectoryType	ClientProtocol R	eplica/LDAP Server
1 KIMGREENE	Primary-Notes	Notes & LDAP	names.nsf
2 KGCIEXTERNAL	Secondary-Notes	Notes	edc.nsf

Directory Assistance Database 'da.nsf' in use

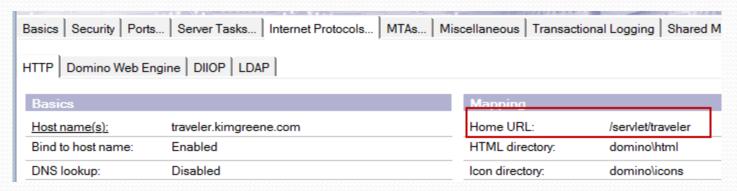


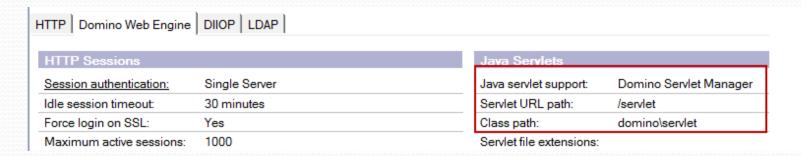




Installing Traveler

Traveler data and server changes





servlets.properties file automatically updated via the install



Starting the Server:

```
HTTP Server: Using Web Configuration View
JVM: Java Virtual Machine initialized.
HTTP Server: Java Virtual Machine loaded
Lotus Traveler: Server starting...
HTTP Server: DSAPI Domino Off-Line Services HTTP extension
Loaded successfully
Servlet engine initialization was successful
HTTP JVM: com.lotus.sync.servlet.TravelerServlet: init
HTTP JVM: Traveler 8.5.2.3 Build 201107280608
Starting replication with server MyServer/KimGreene
Pulling customers.nsf from MyServer/KimGreene customers.nsf
Lotus Traveler: Server started.
```



Basics Secu	rity Ports	Server Tasks	Internet Protocols	MTAs	Miscellaneous	Transactional Logging	Shared Mail	DAOS	Lotus Travele	4
---------------	------------	--------------	--------------------	------	---------------	-----------------------	-------------	------	---------------	---

Basics	
Maximum Memory Size:	512 MB
IPC Socket Ports:	50125 50126
External Server URL:	https://traveler.kimgreene.com/servlet/traveler

Lotus Traveler Access	
Access server:	□ users listed in all trusted directories
Not access server:	Terminations
Remote user commands:	Disabled
User managed security:	Enabled

Logging Level: Informational Obsolete as of Domino 8.5.2 Off SyncML Logging: Package Log Filter: * Maximum File Size: 50 MB Maximum Number of Activity Log Files: 10 Fields Logged - Privacy: Subject; Location; Address; Phone Number

Auto Sync Settings Monitor Polling Interval: 3 seconds Port for TCP Connections: 8642 Heartbeat Algorithm: Indefinite Detection

Server Document Changes

- Set External URL
- Define user access