### **Snapshot of Roadmaps**

# **SoftSummit**<sup>™</sup> SAN JOSE

October 16, 2013

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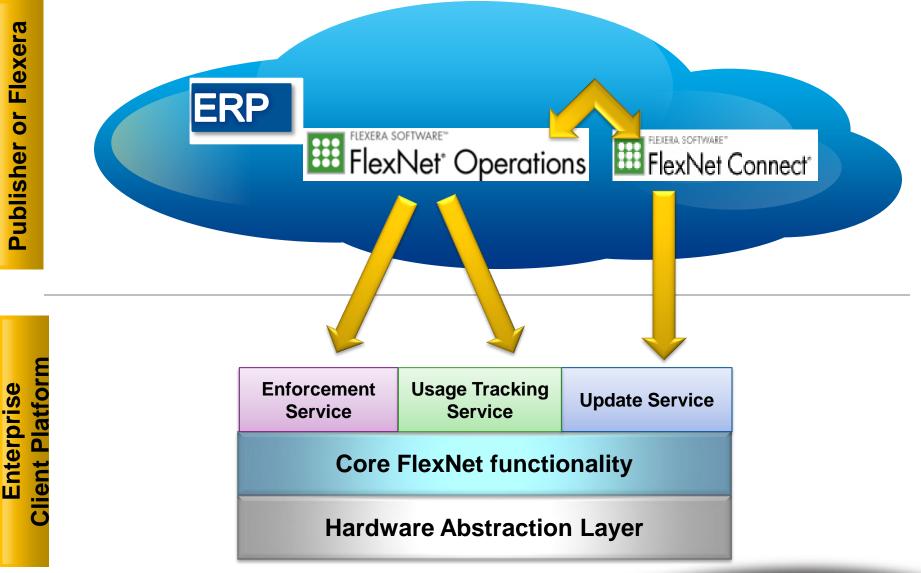


## Some quick updates

- New product version change
  - Purpose: user-friendly and to follow industry standard (e.g. Microsoft)
  - Public version format: "YYYY R(# from the start of the year)
    - FlexNet Publisher 2013 R2 (second release of Publisher in 2013)
  - Will switch to Service Pack terminology
  - Internal product version still remain the same
- End of Version policy has been rolled out
  - 5 years standard support for FlexNet Licensing, 3 years standard support for other products, 1 year limited support, extended support for a fee available
  - Platform end of version policy is being rolled out
    - We will match the Publishers' standard policy and then add limited and extended using Flexera's policy
  - More information: <u>http://www.flexerasoftware.com/support/end-of-life.htm</u>
- End of Life extended indefinitely for Imgrd and Imtools
- FlexNet Publisher Service Pack release strategy
  - Targeting 2 to 4 service packs per year to increase response time
- Product roadmap policy is being rolled out
  - Our goal is to provide 18 months visibility



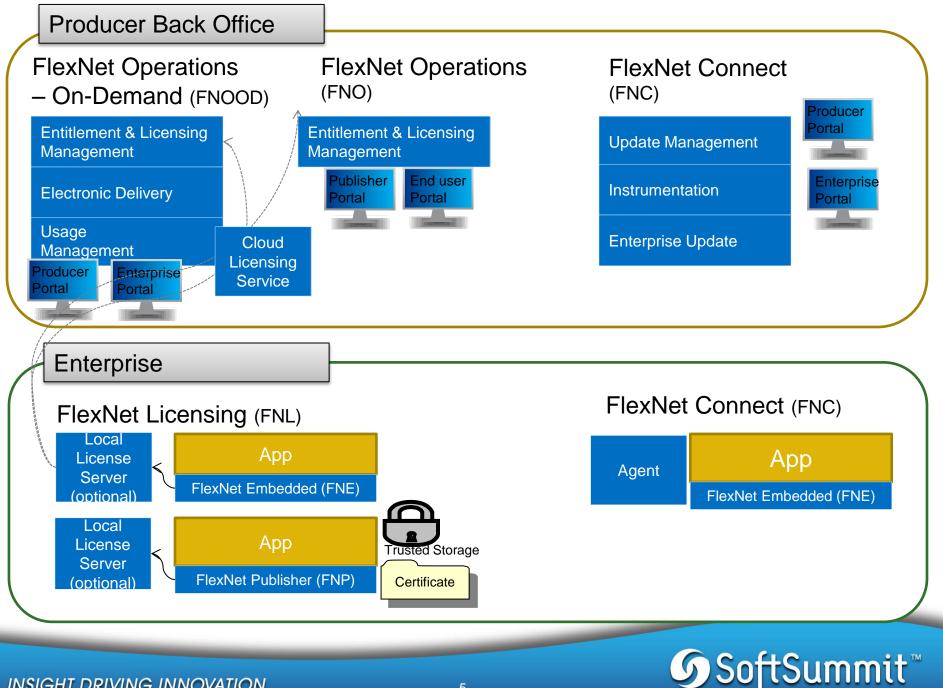
### Flexera high-level architectural vision





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### Terminology



## Enable usage-based licensing

- Why?
  - Join the subscription economy/3<sup>rd</sup> platform, automated enterprise license agreements, ease your customer's experiences
    - Support compliance-based licensing and pricing models (e.g., pay-for-burst, pay-foroverage, compliance automation)
- Available today
  - Introduced FlexNet Usage Capture as an add-on to FlexNet Embedded and Usage Management as an add-on to FlexNet Operations On-Demand
  - Includes usage-based licensing and back-office support for SaaS and on-premise applications
- Coming Spring '14:
  - Support on-premise license servers (FlexNet Embedded)
  - Enable automated license fulfillment & enforcement using Cloud Licensing Service
- Coming Summer '14
  - FlexNet Usage Mgmt available for FlexNet Operations on-premise
  - Support disconnected sites with offline server sync) (FlexNet Embedded)

# Cloning prevention in virtual environments

• Why?

- Virtualization is #1 reason for accidental non-compliance

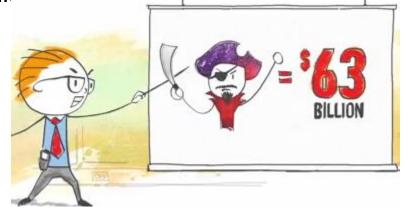
- Available today
  - Deny, bind to VM identifier (UUID) or bind to external application (Imbind)
- Coming Spring '14
  - Detect and trigger "trust break" signal when cloned
    - FlexNet Publisher-trusted storage, FlexNet Operations policy
    - Limited to Windows
- Coming Summer '14
  - Provide same for FlexNet Publisher-Certificate
    - Same limitations
- Consider using Usage or Cloud Licensing Service instead

Virtual machine scenario	Trigger
Paused or resumed	No
Reboots	No
Host reboots	No
Live migrated	No
Imported, copied or cloned	Yes
Started executing snapshot	Yes
Recovered from backup	Yes
Failed over in DR environment	Yes
Failed over in clustered environment	No



### **Enhance security**

- Why?
  - Ensure that users (at different abilities) cannot thwart compliance
    - SIIA '13 survey: 48%-competitive IP theft had serious impact to their business; 63% had reversed engineering challenges
- Available today
  - Anchoring detects when users delete trusted storage, change clocks, etc. FlexNet Publisher trusted storage
  - Renders application unusable when hackers attack licensing parts of application – FlexNet Public
- Coming to FlexNet Embedded
  - Fall '13: Anchoring for Clients
  - Fall '14:
    - anchoring for local license servers
    - tamper resistance



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## Better updates & install-base intelligence using FlexNet Connect

- Why?
  - Reduce tech support costs, remove liability by pushing updates
  - Make smart, pro-active decisions based on how your products are actually being used
    - SIIA '13 survey: 68% struggle with usage visibility; < 25% use tools to capture
- Coming Winter '13
  - In-product over existing agent approach
    - Control the user experience, send more targeted instrumentation data
    - Provide iphone-like experience update your intelligent devices
  - Help your support organization
    - Provide UI with information about every device including updates and instrumentation data
- Coming Summer '14
  - Updated "agent" approach add app update in 2 days
    - Control branding, remove exiting technical limitations, remove "agent" objections
  - Access instrumentation data for extended analysis
    - Mine that rich data to identify patterns and be the "most knowledgeable guy in the room"



### Make compliance quick, easy and painless

- Why?
  - The easier the experience the less
    - complaints, tech support calls and "workarounds"
- Recently released
  - FlexNet Publisher: easier error messages and improved logging
    - Help their IT and your support
- Coming Winter '13
  - FlexNet Operations On-Demand: UI consistency and other improvements to Enterprise portal
  - FlexNet Operations: Significant rewrite of enterprise portal (preview mode)
- Coming Spring '13
  - FlexNet Publisher: reclaim of borrowed licenses (trusted storage)
    - Help "they left for out of town and borrowed a license for a month"
- Coming Summer '14
  - FlexNet Operations On-Demand: download many files more easily, activate FlexNet Embedded licenses more easily
  - FlexNet Operations: replacement of enterprise portal
- During various releases:
  - New platform/OS support for licensing. We'll worry about these so you don't have to

### Public Roadmaps—Deep Dive

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October 16, 2013

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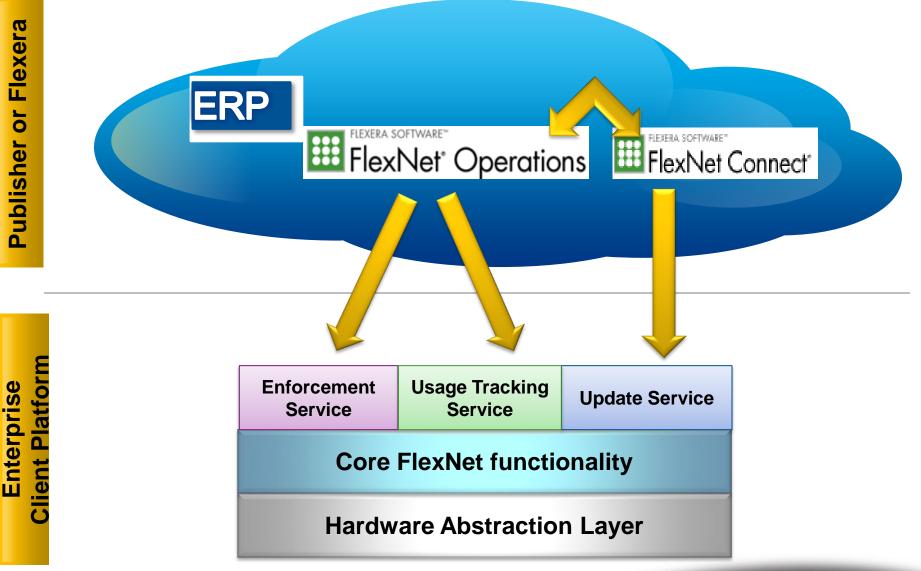
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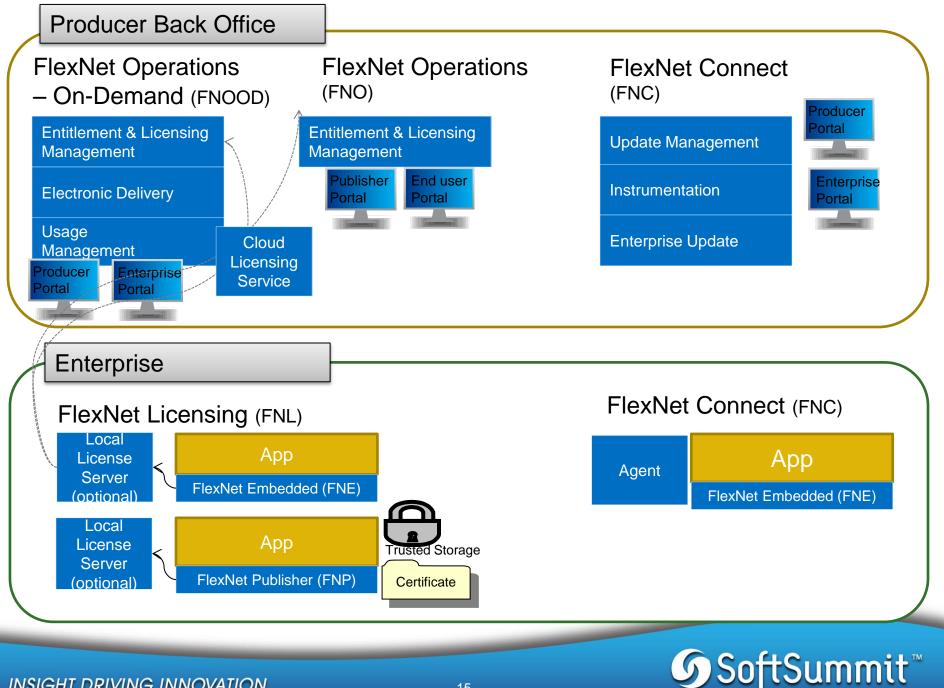
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### Flexera high-level architectural vision



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### Terminology



# FLEXNET CONNECT ROADMAP

As of July 19 2013



# FlexNet Connect winter 2013

Theme	Description	Trend	Modules
Provide on-premises release of backoffice components	<ul> <li>Apply Spring 2013 release to on-premise:</li> <li>Agentless, SDK-based client integration (limited platforms)</li> <li>New module: Enterprise Update Management</li> <li>New module: Instrumentation Management</li> </ul>	#3 – IDM&M2M	On-premise
Updates and data collection for embedded devices	Allow device manufactures to deliver firmware/app updates and collect data (diagnostic, configuration) from embedded devices Features: • Extensible C/C++ kit with low footprint ("porting kit") • New Platform: Linux 32-bit-ARM C SDK, Mac OS C XT SDK	#3 – IDM&M2M	SDKs
Remote diagnostics of endpoints	<ul> <li>Enable detailed snapshot of endpoints for publishers to support end users</li> <li>Feature: <ul> <li>For a given endpoint, view apps installed, updates applied, name-value data collected, and additional instrumentation for a given device</li> </ul> </li> </ul>	#3 – IDM&M2M	All
Enable secure downloads	Add mechanism by which end user cannot "share a link" to download updates	#4 – Security	All

Note: Counts of endpoints will change



### **Device Viewer**

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# Endpoint Configuration Data (Profile)

#### **Details (Configuration Data)**

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### **Event Data**

#### **Details (Event/Instrumentation)**

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### **Application Updates**

#### **Details (Application Updates)**

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	Device Details							Start Page > Dev	ices > Dev	ice Deta
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	THFAllUpdateProduct	8.00		N/A			WELCOME	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	9.50		N/A			WELCOME	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	1.00		N/A			WELCOME	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	10.00		N/A			WELCOME	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	10.50		N/A			WELCOME	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	6.00		THFRPMU	pdate		MSGRETRIEVED	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	14.50		THFSHA1	Invalidsignatur	eUpdate	MSGDELIVERED	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	14.50		THFSHA1	Invalidsignatur	eUpdate	MSGREAD	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	14.50		THFSHA1	Invalidsignatur	eUpdate	MSGRETRIEVED	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	7.00		THFJARU	pdate		MSGRETRIEVED	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	1.00		THFRPMU	pdate		MSGDELIVERED	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	1.00		THFRPMU			MSGREAD	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	1.00		THFRPMU	pdate		MSGRETRIEVED	22-Jul-2013	25-Jul-2	2013
	THFAllUpdateProduct	6.00		THERPMU	pdate		MSGDELIVERED	22-Jul-2013	25-Jul-2	2013



## FlexNet Connect summer 2014

Theme	Description	Trend	Modules
New non-SDK solution to ease implementation	<ul> <li>Replacing the current agent solution</li> <li>Features: <ul> <li>New customizable, Publisher-specific User Interface (UI)</li> <li>Improved multi-platform update</li> <li>Increased download sizes (&gt;2gig)</li> <li>Support for unicode</li> <li>Single publisher-branded UI</li> <li>Multiple platforms (matching the SDKs)</li> <li>Not continuously running (not a service, daemon, agent)</li> </ul> </li> </ul>	#3 – IDM&M2M	All
Access to extended log data for analysis	Provide ability for Publishers to receive instrumentation for analysis	#3 – IDM&M2M	Instrumentation Mgmt

Note: Licensing for FlexNet Connect will be done differently



## FlexNet Connect winter 2014 targets

- Android C SDK
- Update delivery integration into existing enterprise update framework
  - E.g. SCCM, AdminStudio and others
- Performance and scalability improvements to the backoffice instrumentation infrastructure
  - Data transport optimization (chunking of data)
  - Easier sending of files
  - Additional meta data for upload events such as:
    - Event type: Alerts vs. crash logs vs. warnings vs.
    - Event priority



## FlexNet Connect post-2014 targets

- Reporting engine rewrite
- Retirement of the Windows/Linux Java agent
- Single back office for entitlement, licensing, update and usage analytics
  - Enterprise portal single UI for enterprises for entitlements & updates, inside FlexNet Operations On-Demand
  - Entitlement-driven updates protect value of maintenance & subscription plans
- Enable remote device management
  - Rules framework: To act upon only the most critical events (and also minimize data storage requirements), API sends data only when some rules are met. For example, send data if error\_code = 123 is triggered in the application
  - Remote delivery and execution of scripts on machines



# FLEXNET OPERATIONS ON-DEMAND ROADMAP

As of July 19 2013



## FlexNet Operations On-Demand winter 2013

Theme	Description	Trend	Modules
Improve support for changing licensing technology from one product version to another	Allow publishers to swap licensing technologies over product versions without reissuing entitlements	#5 - Make licensing easier	Licensing Lifecycle
Enable end customer reporting	<ul> <li>Enterprise Portal:</li> <li>Provide CSV extract of the "Search Licenses" and "Search Entitlement Lines" search results</li> </ul>	#5 - Make licensing easier	All
Improved user interface	<ul> <li>Enterprise portal:</li> <li>UI standardization</li> <li>Product tree view</li> <li>Download page</li> <li>Producer portal:</li> <li>Single click to inactivate all line items</li> </ul>	#5 - Make licensing easier	All
Support FlexNet Licensing enhancements	Remote activation for FlexNet Embedded license server	#5 - Make licensing easier	Licensing Lifecycle
Other enhancements	Windows 8 certification for Download Manager		Electronic Software Delivery



### **Example of UI standardizations**

#### Making tables consistent •

before

Your login ID shows that you are a member on multiple accounts. Pleas login as another user.

Your login ID shows that you are a member on multiple accounts. Please select the account you wish to

Name

Ariane Habets

Ariane habets

Araine Habets-qa

Ariane Habets-ga

use for the current session or login as another user.

(If you think these accounts should be merged please contact Support.)

Company Name

16163-from-account

ABC Companygrößerer

16163-to-account

Flexera Software

Company Name	Name	Notes
16163-from-account	Ariane Habets	(Click to edit)
16163-to-account	Ariane habets	(Click to edit)
ABC Companygrößeren	Araine Habets-qa	(Click to edit)
Flexera Software	Ariane Habets-qa	(Click to edit)

(If you think these accounts should be merged please contact Support.)

### Making buttons consistent

before	Password Finder	after	Password Finder
	If you have already signed up as a member for Download Center but have for		If you have already signed up as a member for Download Center but have forgotten your password, enter your email address below and click the "Submit" button.
	and click the "Submit" button.		For security reasons, we will not display your User Name and Password on the screen. We will send the necessary information to the email address you enter below.
	For security reasons, we will not display your User Name and Password on the email address you enter below.		* Required
			Email Address:*
	Email Address: Submit		
			Submit

### Cleaning up the page and access to menus

Listed below are your entitlements. To view the details of a particular entitlement, click on the Ser Number/Order Number. Canceled entitlements are not displayed.	rial
I to 25 of 597 Show 25 - per page.	
Serial Number/Order Number	Entitlement Date 1
C6D676Q-D09-80CF8ADF4N	Jul 16, 2013
SSF-0000160687	Jul 16, 2013
SSF-0000160602	Jul 16, 2013

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Notes

(Click to edit)

(Click to edit)

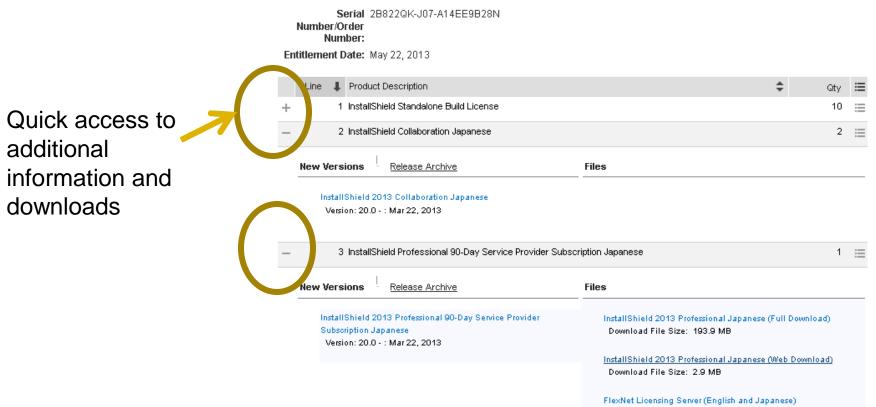
(Click to edit)

(Click to edit)

### **Product tree view**

#### **Entitlement Detail**

Click on the "Download" link next to the product to download it (only available when applicable).



Download File Size: 18.6 MB



### Download page

ITS RECEIVABLE > ACCOUNTS RECEIVABLE MODULE VER. 6.0 SERVICE PACK 1

### **Product Download**

#### Accounts Receivable Module ver. 6.0 Service Pack 1 6.0 Service Pack 1

From this page you can download and obtain information about the specific product(s) below.

You must install version 6.0 before applying servi	ice	packs.
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Down	load Selected Files	Order Ci	Show All Fil	es 🗮			16 File:
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## FlexNet Operations On-Demand summer 2014

Theme	Description	Trend	Module
Improved FlexNet Embedded Integration	Reduce the amount of configuration required to implement FlexNet Embedded integrate with the back office. Features: • Ability to disable some of the configurations • Default models and series • Improved upgrades	#5 - Make licensing easier #3 – IDM&M2M	Licensing Lifecycle
Improve download experience	<ul> <li>Complex products may require downloads of many files.</li> <li>Add multi-download on the product list page (same capability as the order download page)</li> </ul>	#5 - Make licensing easier	Electronic Software Delivery



### FlexNet Operations On-Demand winter 2014 targets

- Support FlexNet Licensing virtualization enhancements
  - Policy support: allow or deny activation if in virtual machine
  - Support ACPI GenerationID cloning and backup/restore
- Self-service property file management for Publishers
  - Property files include labels, page contents as well as access to features and some configuration.
    - Example: download link duration

# • Provide activation quantity on order search results

Click on the "Download" link next to the product to download it (only available when applicable).

C	order Orig	inating Flexera Software SE count:						
	Orde	r Date: Feb 17, 2011						
	PO N	umber:						
	Downloa	d						
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+	-	2 SalesView	SalesView	1000	9	9333-7AE9-A88B-57C0	:=	• • TM

## FlexNet Operations On-Demand post-2014 targets

- Enable plug-n-play licensing technology integration
  - Simplify licensing set up
  - Extensible host-id types for licensing technologies (e.g. FlexNet Publisher, FlexNet Embedded, homegrown)
  - Plug-ins for license generation
  - Pluggable business logic for license generation
- Revamp UI experience with licensing
  - One experience regardless of licensing technology

# FLEXNET OPERATIONS ON-PREMISE ROADMAP

As of July 19 2013



# FlexNet Operations winter 2013

Theme	Description	Trend	Modules
Revamp enterprise portal UI	<ul> <li>Re-vamped look &amp; feel of the enterprise portal for easier update, consistent experience and updated/refreshed look</li> <li>Redone menus</li> <li>Redone table format</li> <li>New search flow</li> <li>Minimization of informational elements on pages</li> <li>preview mode only (for feedback)</li> </ul>	#5 - Make licensing easier	All
Support FlexNet Licensing enhancements	<ul> <li>Support FlexNet Embedded Certificate license format</li> <li>Improve performance for FlexNet Embedded activations</li> <li>Adding repair policy for ACPI GenerationID</li> </ul>	#5 - Make licensing easier	License Lifecycle



## Re-Vamped look & feel for Enterprise Portal

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View -	Edit - P	age 1 🕨 刘		Table format change				Advanced Search
Туре	Activation ID	Entitlement ID	Sold To	Product	<u>Ver</u>	Copies Left	Expiration	Maintenance
	48ab-a221-13fe-eac3-5e87-f	CavinAgain	Information Not Available Type: End Customer HowdyPartner Type: Distributor	Camel Ver 3.3, Qty/Copy 1	3.3	182	Jul 15, 2016	
	Hulk	HulkENT	<ul> <li>Ape</li> <li>Type: End Customer</li> <li>HowdyPartner</li> <li>Type: Distributor</li> </ul>	Owl Ver 1,1, Qty/Copy 1	1,1	500	Jul 24, 2015	
T	Banner	BulkHulk	<ul> <li>HowdyPartner</li> <li>Type: Distributor</li> </ul>	Owl Ver 1,1, Qty/Copy 1	1,1	500	Jul 24, 2015	
	Green	BulkHulk	HowdyPartner      Type: Distributor	Owl Ver 1,1, Qty/Copy 1	1,1	500	Jul 24, 2015	
C	1ebd-965f-13fe-ef28-d8c7-f	1ebd-965f-13fe-ef	Ape     Type: End Customer     HowdyPartner     Type: Distributor	Camel Ver 3.3, Qty/Copy 1	3.3	45	Jul 15, 2016	
	5a13-4558-13fe-f048-b277-f	5a13-4558-13fe-f0	Ape     Type: End Customer     HowdyPartner     Type: Distributor	Camel Ver 3.3, Qty/Copy 1	3.3	16	Jul 15, 2016	
	7e81-697d-13fe-f1b9-ee07-f	7e81-697d-13fe-f1	▶ Cavin Type: End Customer HowdyPartner Type: Distributor	Camel Ver 3.3, Qty/Copy 1	3.3	42	Jul 15, 2016	

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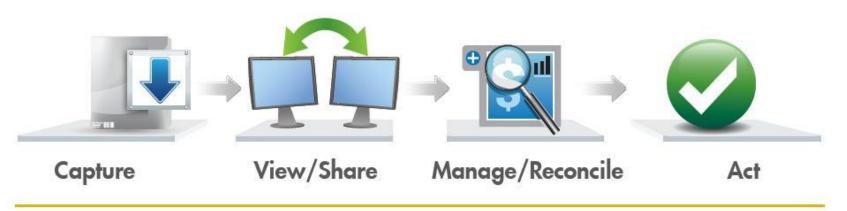
## FlexNet Operations summer 2014

Theme	Description	Trend	Modules
Revamp enterprise portal UI	Re-vamped look & feel of the enterprise portal for easier update, consistent experience and updated/refreshed look Replaces old Enterprise Portal UI	#5 - Make licensing easier	All
Enable usage- based licensing	<ul> <li>New module to enable usage-based licensing management</li> <li>Cloud-based license server</li> <li>UI to provide usage reports for end customers and providers</li> <li>Reconciliation process to compare use vs. entitlement</li> <li>Integration into back end systems for optional billing</li> </ul>	#1 - Usage-based licensing	(new) Usage Management
Improve performance	Update Jboss, 3 <sup>rd</sup> party library, installer		



What is a Usage-based Trust but Verify Licensing?

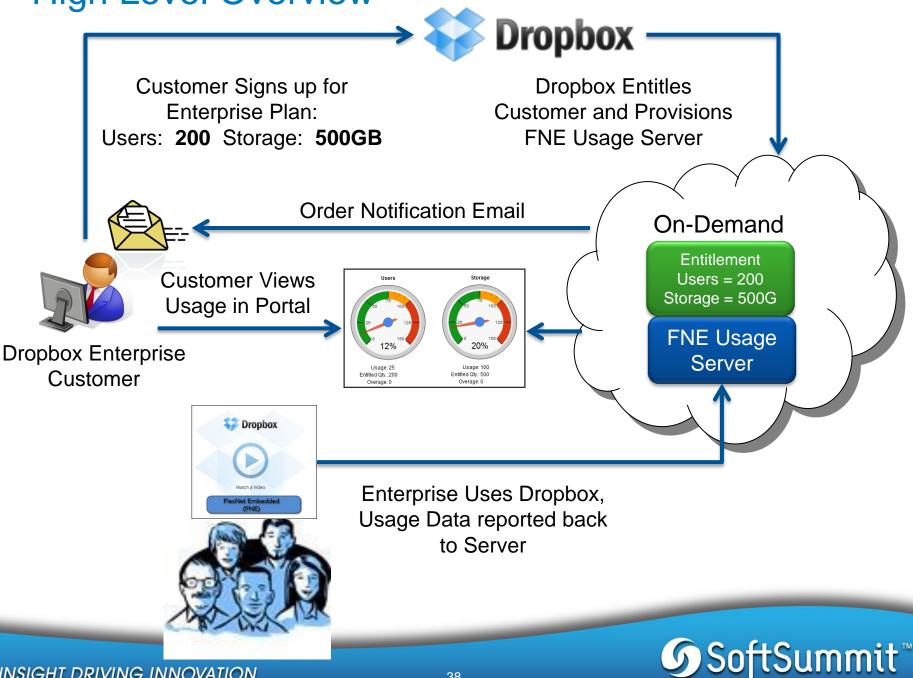
Entitles the customer with the right to use the application freely then captures usage, compares usage to entitlement, shares that usage with the customer for reporting and reconciliation (if needed).



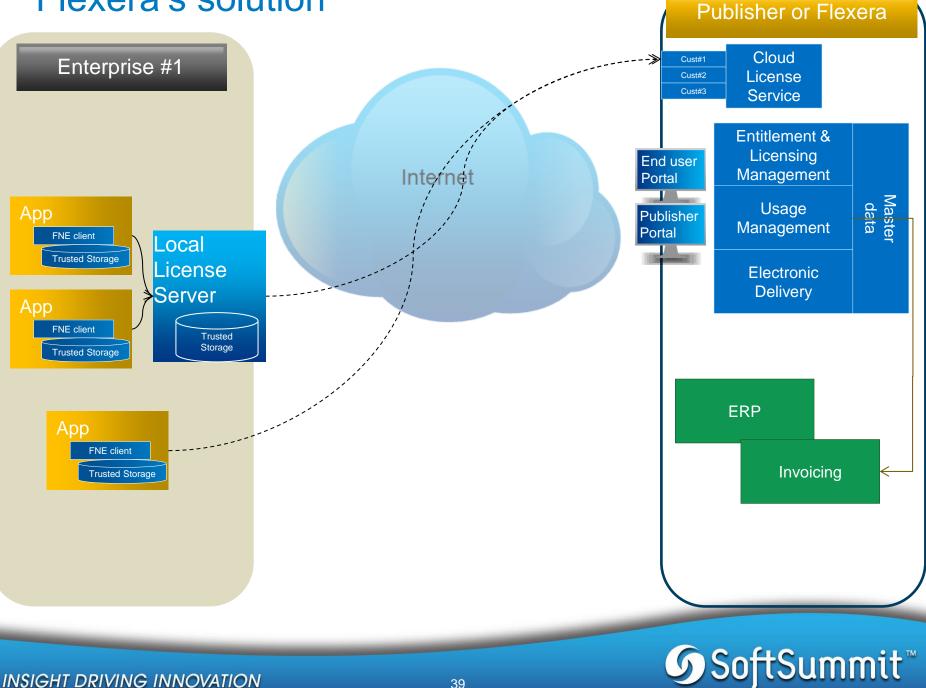
Enables compliance automation, pay-for-burst, pay-for-use

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#### **High Level Overview**



#### Flexera's solution



#### FlexNet Operations winter 2014 targets

- End customer reports powered by JasperReports in Enterprise Portal
  - Pre-built reports for enterprise users in enterprise portal with permission enforcement, fully integrated, and extensible by Publisher
- Continued single UI for licensing/activations ("machine UI")
- Support FlexNet Licensing enhancements
  - Enable multi-ownership of devices
  - Support offline server sync from FlexNet Embedded
- Revamp publisher user experience
  - Applying revamped enterprise UI look to the publisher portal



#### FlexNet Operations post 2014 targets

- Remove support of Cognos
- Enable plug-n-play licensing technology integration
  - Extensible host-id types (for FlexNet Publisher, FlexNet Embedded)
  - Pluggable business logic for license generation
  - Support publisher-defined fields for users, orgs & entitlements
  - Java license generation interfaces for FlexNet Embedded, FlexNet Publisher (reuse interfaces for homegrown)

### End Of life

- End of support:
  - FlexNet Operations 12.5.0.1 and prior
  - Firefox 16 and prior
  - Internet Explorer 7.0 and prior



# **FLEXNET LICENSING**

FlexNet Publisher

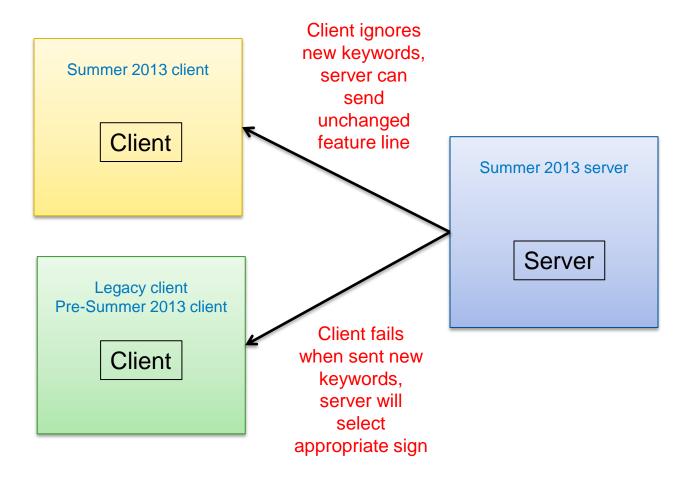


#### FlexNet Publisher summer 2013

Theme	Description	Trend
Improve backward compatibility	Ensure backward compatibility between client and server when adding in new license keyword Feature: • Eliminate X-version signature validation	#5 - Make licensing easier
Provide better diagnostics for easier support	<ul> <li>Providing diagnostic information that would provide better insight into our customer licensing environment</li> <li>Feature: <ul> <li>Enable logging of local license server useful log information (statistics)</li> </ul> </li> </ul>	#5 - Make licensing easier
Provide better error handling for easier support	<ul> <li>Improve the user experience with better error message</li> <li>Feature: <ul> <li>Improve error message handling in managing activation, license servers, etc</li> </ul> </li> </ul>	#5 - Make licensing easier



#### Approach to ensure backward compatibility



If all clients are version >=N, then FEATURE f demo 1.0 permanent 5 NEWKEYWORD SIGN=xx else for each version v<sub>i</sub> < N client FEATURE f demo 1.0 permanent 5 NEWKEYWORD SIGN=xx Vv<sub>1</sub>\_SIGN=xx...Vv<sub>n</sub>\_SIGN=xx

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#### **Diagnostic information**

 Provide additional environment information

General,
 network,
 host,
 shutdown,
 settings

```
(@lmgrd-SLOG@) =====
(@lmgrd-SLOG@) === LMGRD ===
(@lmgrd-SLOG@) Start-Date: Mon May 20 2013 14:39:36 Pacific Daylight Time
(@lmgrd-SLOG@) PID: 3952
(@lmgrd-SLOG@) LMGRD Version: v11.12.0.0 build 127178 i86 n3 ( build 127178 (ip
(@lmgrd-SLOG@)
(@lmgrd-SLOG@) === Network Info ===
(@lmgrd-SLOG@) Socket interface: IPV6
(@lmgrd-SLOG@) Listening port: 27000
(@lmgrd-SLOG@) Socket FD: 496
(@lmgrd-SLOG@)
(@lmgrd-SLOG@) === Startup Info ===
(@lmgrd-SLOG@) Is LS run as a service: No
(@lmgrd-SLOG@) Server Configuration: Single Server
(@lmgrd-SLOG@) Command-line options used at LS startup: -c counted.lic -l t
(@lmgrd-SLOG@) License file(s) used: counted.lic
(@demo-SLOG@) ===
(@demo-SLOG@) === Vendor Daemon ===
(@demo-SLOG@) Vendor daemon: demo
(@demo-SLOG@) Start-Date: Mon May 20 2013 14:39:37 Pacific Daylight Time
(@demo-SLOG@) PID: 8576
(@demo-SLOG@) VD Version: v11.12.0.0 build 127178 i86 n3 ( build 127178 (ipv6))
(@demo-SLOG@)
(@demo-SLOG@) === Startup/Restart Info ===
(@demo-SLOG@) Options file used: None
(@demo-SLOG@) Is vendor daemon a CVD: No
(@demo-SLOG@) Is TS accessed: No
(@demo-SLOG@) TS accessed for feature load: -NA-
(@demo-SLOG@) Number of VD restarts since LS startup: 0
(@demo-SLOG@)
(@demo-SLOG@) === Network Info ===
(@demo-SLOG@) Socket interface: IPV6
(@demo-SLOG@) Listening port: 55960
(@demo-SLOG@) Socket FD: 60
(@demo-SLOG@) Daemon select timeout (in seconds): 1
(@demo-SLOG@)
(@demo-SLOG@) === Host Info ===
(@demo-SLOG@) Host used in license file: scltnatarajan7
(@demo-SLOG@) Running on <Physical/Virtual>: Physical
(@demo-SLOG@) LMBIND needed: No
(@demo-SLOG@) LMBIND port: -NA-
```

```
INSIGHT DRIVING INNOVATION
```

#### **Diagnostic information**

#### • Provide performance data

#### - Peak transactions over a period of time

```
(demo-SLOG())
    @demo-SLOG@) === Last 10 Client Requests Processing Time (in ms) ===
    (demo-SLOG() Time: Mon May 20 2013 14:41:10 Pacific Daylight Time
    (demo-SLOG() Request processing time, when, #concurrent clients, (private bytes (in KB)), client info (user, node, FD)
    @demo-SLOG@) 00000000 ms at 14:41:10(5/20/2013),#3,(4856K),(dnatarajan,scltnatarajan7,604)
    (demo-SLOG@) 0000000 ms at 14:39:50(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000000 ms at 14:39:50(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000156 ms at 14:39:50(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000000 ms at 14:39:49(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000000 ms at 14:39:49(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000141 ms at 14:39:49(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    (demo-SLOG())
    (@demo-SLOG@) === Top 10 Peak Client Requests Processing Time (in ms) ===
    (demo-SLOG() Time: Mon May 20 2013 14:41:10 Pacific Daylight Time
    (demo-SLOG() Request processing time, when, #concurrent clients, (private bytes (in KB)), client info (user, node, FD)
    @demo-SLOG@) 00000172 ms at 14:39:49(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000156 ms at 14:39:47(5/20/2013),#3,(4916K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000156 ms at 14:39:48(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000156 ms at 14:39:50(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000141 ms at 14:39:49(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000140 ms at 14:39:49(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000140 ms at 14:39:48(5/20/2013),#3,(4916K),(dnatarajan,scltnatarajan7,764)
    @demo-SLOG@) 00000016 ms at 14:39:49(5/20/2013),#3,(4912K),(dnatarajan,scltnatarajan7,764)
    (demo-SLOG())
    @demo-SLOG@) === Top 10 Peak In-house Operations time (in ms) ===
    (demo-SLOG() NOTE: Peak times greater than 4 seconds get recorded.
    (demo-SLOG() Time: Mon May 20 2013 14:41:10 Pacific Daylight Time
    (demo-SLOG() In-house operation time, when, #concurrent clients
    (demo-SLOG())
    (demo-SLOG() === Active Connections Info ===
    (demo-SLOG() Peak active connections #3 attempted at Mon May 20 2013 14:39:39 Pacific Daylight Time
    (demo-SLOG())
    @demo-SLOG@) === Memory Usage Info ===
INS(@demo-SLOG@) Peak private bytes 4964K attempted at Mon May 20 2013 14:41:10 Pacific Daylight Time
```

#### FlexNet Publisher winter 2013

Theme	Description	Trend
Increase manageability for borrowed licenses	<ul> <li>Better support to reclaim borrowed license when access to the computing device is no longer available (e.g., stolen, lost, damage)</li> <li>Feature: <ul> <li>Provide functionality to reclaim a borrowed license from command line</li> </ul> </li> <li>Limited to Trusted Storage</li> </ul>	#5- Make licensing easier
Improve detect and prevent of virtual machine cloning	<ul> <li>Reduce software license leakage due to virtual machine cloning</li> <li>Feature: <ul> <li>Support clone and backup/restore using ACPI Virtual Machine Generation ID</li> <li>Support VMware, Hyper-V, Citrix Xen</li> </ul> </li> <li>Limited to certain versions of Windows and Trusted Storage</li> </ul>	#2- Virtualization
Platform updates	<ul> <li>Windows Server 2012 R2*</li> <li>Windows 8.1 (Blue)*</li> <li>Mac OS X 10.9 (Maverick)*</li> <li>Visual Studio 2012</li> <li>*dependent on OS release dates</li> </ul>	



#### ACPI Virtual Machine GenerationID

- What is it?
  - Introduced by Microsoft to address some key problems that arise from virtual machine operations
  - 128-bit random integer
  - Extracted using the standard ACPI interface (requires elevated privilege)
- How does this apply to FlexNet Licensing?
  - Trusted storage will leverage ACPI GenerationID as part of the binding elements
  - Introduction of a new VM ID as part supporting certificate based licensing\*

Scenario	Generation ID changed
Virtual machine is paused or resumed	No
Virtual machine reboots	No
Virtual machine host reboots	No
Virtual machine starts executing a snapshot (every time)	Yes
Virtual machine is recovered from backup	Yes
Virtual machine is failed over in a disaster recovery environment	Yes
Virtual machine is live migrated	No
Virtual machine is imported, copied, or cloned	Yes
Virtual machine is failed over in a clustered environment	No

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\*summer 2014

#### FlexNet Publisher summer 2014

Theme	Description	Trend
Improve detect and prevent of virtual machine cloning	<ul> <li>Reduce software license leakage due to virtual machine cloning</li> <li>Feature: <ul> <li>Support clone and backup/restore using ACPI Virtual Machine Generation ID</li> <li>Support VMware, Hyper-V, Citrix Xen</li> <li>Certificate support (new composite hostid)</li> </ul> </li> <li>Support both node-locked and concurrent licensing model</li> <li>Limited to certain versions of Windows</li> </ul>	#2- Virtualization
Platform updates	<ul> <li>Red Hat Enterprise Linux 7*</li> <li>*dependent on OS release dates</li> </ul>	



#### FlexNet Publisher post 2014 targets

- Provide a single, central administrative console to manage licensing servers
  - Central administrative console that is capable of managing all FlexNet Licensing local license servers
    - Consistent look and feel across licensing technology
    - intuitive administration for all FlexNet local license servers



## End of life

- End of support for the following FlexNet Publisher platforms
  - Red Hat Enterprise Linux version 4.x (target for Summer 2013)
  - SGI IRIX 6.5.30 (target for Summer 2013)
- Additional info:
  - <u>http://www.flexerasoftware.com/support/eol/flexnet-publisher-end-of-life.htm</u>



# **FLEXNET LICENSING**

FlexNet Embedded



#### FlexNet Embedded fall 2013

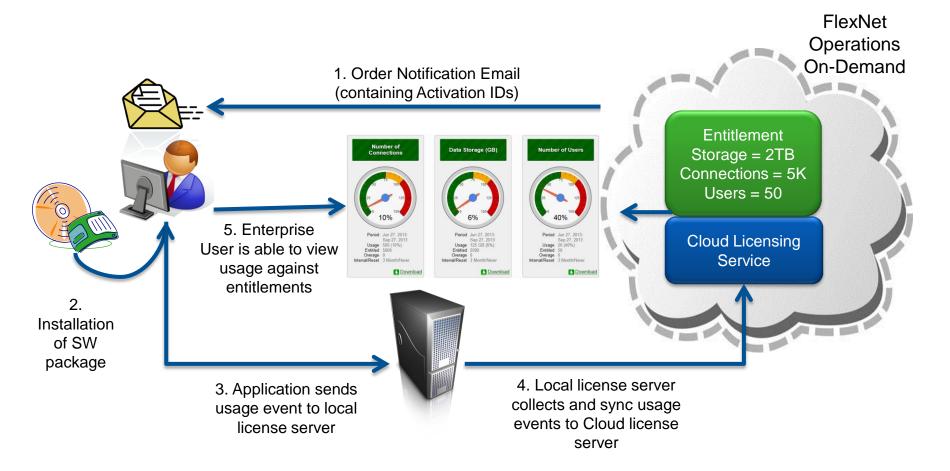
Theme	Description	Trend
Increase licensing security	Minimize risk of license leakage by providing a secure environment for offline trials, evaluation, emergency, etc. license Feature: • Client support for secure anchor Limited to Windows and Linux	#4 - Security
Platforms update	<ul> <li>Support for C/C++ XT SDK on Mac OS X</li> <li>Support for Java XT SDK on Mac OS X</li> <li>Support PIC-enabled SDK</li> </ul>	



## FlexNet Embedded spring 2014

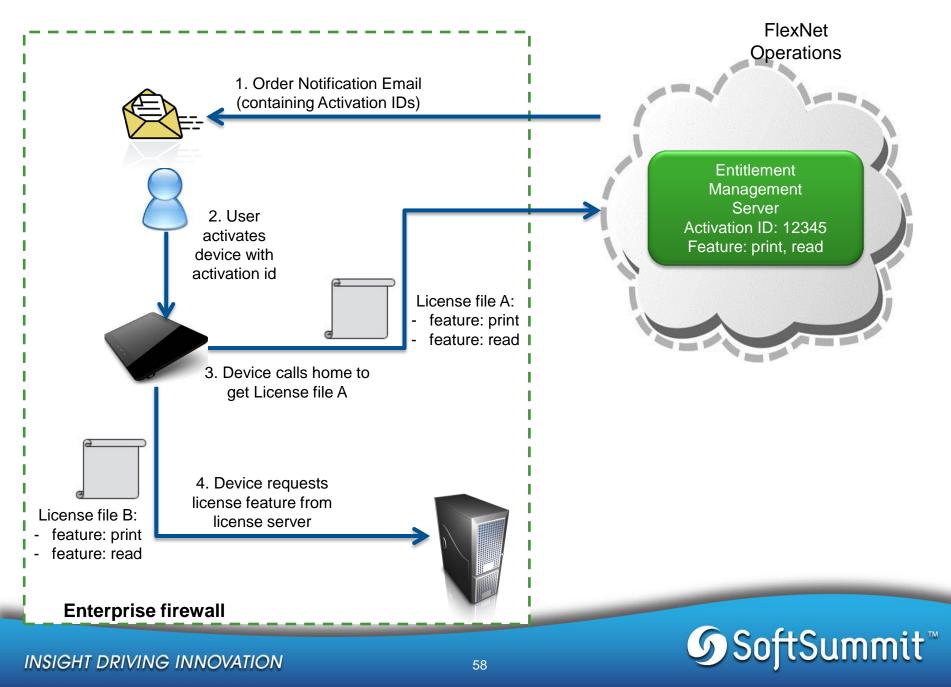
ltem	Description	Trend
Enable usage capture for on- premise software	<ul> <li>Provide the ability to do "usage-based" licensing for applications running within enterprises' firewalls/data centers</li> <li>Feature: <ul> <li>Supports for usage-based models (metered, metered cap)</li> <li>Supports local license server</li> </ul> </li> <li>Requires: Usage capture &amp; Back-office usage management</li> </ul>	#1 - Usage- based licensing
Support for generation of FNE-license file	<ul> <li>Local license server support for activation of device where:</li> <li>space requirement is constraint</li> <li>has variable license fulfillment source</li> </ul> Feature: <ul> <li>Local license server support for generation of FNE-license file</li> <li>Back-office generation of FNE-certificate style license support for connected client</li> </ul> Limited: C SDK, non-usage local license server & FlexNet Operation	
Improve local license performance ("150K" devices)	<ul> <li>Provide ability to manage 150K devices for a single license server</li> <li>Feature: <ul> <li>Support 150K devices</li> <li>Improve license server restart time</li> </ul> </li> <li>Limited: Non-usage local license server</li> </ul>	#3 – IDM&M2N
Platform updates	<ul> <li>Windows Server 2012 R2*</li> <li>Windows 8.1 (Blue)*</li> <li>Mac OS X 10.9 (Maverick)*</li> <li>Visual Studio 2012</li> <li>*dependent on OS release dates</li> </ul>	

#### Enable usage capture for on-premise software





#### FlexNet Embedded license file support



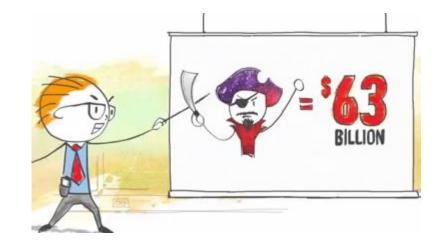
#### FlexNet Embedded fall 2014

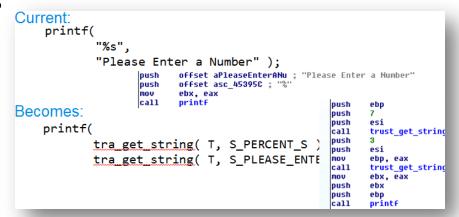
Item	Description	Trend
Enable collection of usage and sync in a disconnected/ offline environment	Allow exporting of usage data and importing the data to back-office system Requires: Back-office license lifecycle management	#1 - Usage-based licensing
Support software tamper resistance application	Provide an additional layer of security protection to harden the application to minimize or reduce risk due to software piracy Limited: C/C++ XT SDK on Windows and Linux	#4- Security
Increase licensing security for local license server	<ul> <li>Minimize risk of license leakage by providing a secure environment for offline trials, evaluation, emergency, etc. license</li> <li>Feature:</li> <li>Local license server support for secure anchor</li> </ul>	#4- Security



#### Tamper resistance targets

- Protection against...
  - Debuggers
  - Fraudulent signing of app & dlls
  - Removal of certificate
  - Modification of apps & dlls
- Obfuscation & Intertwining...
  - SDT like value but with aliases
    - Hide Strings
    - Hide Variable Contents
    - Hide Operations on Variables
    - Hide Imports From Static Analysis
    - Multiple Paths of Execution
  - Hide yes/no decisions
  - Thwart static analysis
  - Protection against in-memory patching





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#### FlexNet Embedded post-2014 targets

- Support occasionally disconnected client (client store and forward)
  - Persist and manage the handling of storing and forwarding usage message to the back-office systems
  - Ability to support batch send of usage messages (asynchronously) on a scheduled based (configurable by both publishers and enterprises)
  - Query API when was the last time data was successfully sent and how much is left to be sent and how old is it.
- Improve detect and prevent of virtual machine cloning
  - Reduce software license leakage due to virtual machine cloning
    - Allow software producer to securely monetize their software in a virtual environment
    - Help Enterprise stay in software compliance due to virtual machine cloning
- Support license server in the cloud
  - A managed service offering that supports license server capabilities in a cloud environment
    - Addresses ease of license management and security
- Support named/user licensing model
  - Licensing model that would allow the use of application across multiple devices
- Add command line tools to automate and streamline license management:
  - Display local license server status and configuration properties
  - Configure/update local license server properties
  - Configure/update reservation list
  - Active local license server
    - Online and offline support



## End of life

End of Standard Support for the following (implies only Limited Support available):

- Red Hat Enterprise Linux 5.x
- Java SE 6

End of Limited Support for the following (implies only Extended Support available):

- AIX 5.3
- Debian 5.x (Linux)
- FreeBSD 8.1
- Oracle Solaris 9
- Windows Embedded Compact 6.0 (formerly Windows CE 5.0)

End of Extended Support (implies NO SUPPORT):

- Debian 4.x (Linux)
- HP HP-UX 11iv1
- HP HP-UX 11iv2
- Java SE 5
- Windows Embedded Compact 5.0 (formerly Windows CE 5.0)
- Windows Embedded Standard 6.0 (formerly Windows XPe 6.0)
- Microsoft Visual Studio 2005
- Additional info:
  - http://www.flexerasoftware.com/support/eol/flexnet-embedded-end-of-life.htm

