

A night-time photograph of a city skyline, likely Boston, featuring several illuminated skyscrapers and a bridge over a body of water. The lights from the buildings and bridge are reflected in the water. The sky is a deep blue, suggesting dusk or dawn. The overall scene is vibrant and modern.

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*INSIGHT DRIVING INNOVATION*

# A CUSTOMER PERSPECTIVE: LANCOPE

## NETWORK SECURITY MONITORING SOFTWARE

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# Lancope - Company BIO

- Vision to Secure, Intelligence to Protect
  - <http://www.lancope.com>
- Network Monitoring from Flow Data
- 13 years in the Market
  - 3 years of significant growth
  - 135 people and growing
- Software company
  - Sells product based on hardware and virtual appliances
- StealthWatch System
  - Sensors, Collectors, Management Software
  - Flow Replicators, Identity Appliances

# Approach to Market

- Typical purchase:
  - 1 Management Console, 2-3 Collectors, 0-10 Sensors
  - 4-10 devices, can be as many as 50-60
- “Horizontal” product to many verticals
  - Federal government / state government
  - Financial
  - Healthcare
  - University
  - Retail
  - Manufacturing
  - Focus on Global 2000
- Various channels
  - Historical focus on direct sales
  - In transition to distribution model



# History of Licensing at Lancope

- First product to market – standalone appliance
  - Rated on performance, limited by hardware
  - No licensing
- Addition of management tier
- Addition of collectors
  - Tiered approach
  - Sell different price bands on same appliance platform
  - No licensing
- First licensing implementation home grown
  - License from Management console
  - Sub-components distributed from manager to collectors
  - Minimal enforcement
  - Manual license creation and distribution

# Challenges Faced

## Several issues identified simultaneously:

- Introduction of new “virtual appliance”
  - First full software product
  - Need stronger “node locking” enforcement / copy protection
  - Need software distribution solution including export compliance
  - Desire to eliminate manual key generation
    - Complicated by use of UUID from virtual machine
- Introduction of significant new channel partner
  - Need to support inventory of “license features”
  - Need to support method of registering purchase and provision of license
- Anticipated need for greater licensing flexibility
  - Product management roadmap indicated product segmentation

# Flexera Roll-out

- Two phases
- First phase – hosted software distribution
  - Immediate need for software distribution platform “fast-tracked”
  - Launched basic hosting within ~3 months
  - Used to distribute new virtual appliances and existing “home grown” license keys
- Second phase – integrated license library and full entitlement management, device management, license management system
  - New product release that required FNE to operate
  - Took ~9 more months

# Flexera Architecture

- Catalog Level
  - 1:1 match against price list
  - Contains features required to activate devices
- Product Level
  - Consolidation of “like” catalog items to reduce complexity
  - Created per major release (X.Y)
    - Minor releases rolled up (X.Y.z)
  - File container for updates to next version and updates within current version
- Device series / device models
  - No “in the field upgrades” so series and models match
  - Mostly “activation” features with exception of manager



# Product Licensing Implementation

- Node locked (physical and virtual) using trusted storage
- License management possible from each appliance via admin console
- All license interfaces developed within product
- Centralized management from Console appliance
  - “Brokered” communication with back office
  - No license server
- Support on-line and off-line activation
  - Can accept “batch” of response.bin files using zip
  - All activation via portal, do not use activation codes

# Two licensing approaches

- “Defined date” expiration model
  - Used for direct sales
  - Requires use of UDF found in Order line
    - “Permanent” or “mm/dd/yyyy”
  - Supports both perpetual sales and evaluations
  - Need to know date at time of order
- “Duration based” expiration model
  - Used for channel sales
  - Works with license tokens
  - Supports both perpetual sales and “30-days from registration” type evaluations

## View FNE License Model

View ▾

Help ?

System License Model ID	281
Name	Duration based feature expiration
Type	Entitlement Line
Feature Version	From capability
Expiration Date	Duration-based From: Entitlement line effective date Interval: (Value of catalog item UDF (LIC_DUR_DAYS))
Start Date	Entitlement line effective date
Issuer	Unused
Notice	\${account.id}
Vendor String	Value of catalog item UDF (LIC_DUR_DAYS)
Serial Number	Unused
Virtualization	Always allowed

# Flexera and SFDC

- Salesforce.com
  - Heavily invested in platform and supporting technologies
  - Prior to Flexera, sole repository for sales transactions, asset tracking, entitlements
  - Pros:
    - Good transaction history
  - Cons:
    - Bad at representing “current state” of an account
  - No integration with Flexera today
    - Striving to reconcile data differences between two systems before integrating
    - Finalizing workflows before trying to automate
    - Use of reports from SFDC -> transaction files for import
    - Significant “double entry” required for each order
  - Use of Marketo as front-end for evaluations
    - Capture end-user data via forms (easiest for Marketing)
    - Use reports to drive entitlements within Flexera (manual process)

# Surprise Benefits

- Once implemented, have been able to support multiple license and fulfillment challenges with no change in product code
  - Channel distribution, late binding duration based eval
- Addition of custom pages with HTML Content IDs allows great flexibility
  - Custom “ product home page”
- Custom file download feature implemented
  - Utilizes existing file upload/download/entitlement infrastructure
  - Met content distribution challenge with fairly little effort



# Lessons Learned - Challenges in Implementation

- Initial product licensing architecture not compatible with FNOOD
  - Bad assumptions based on working with development server tool
  - Recommend use of UAT at earliest possible point in process
- “Device” implementation / tools support in FNOOD less mature than other areas
  - Fewer transaction files
  - Some crucial edit requirements not supported
- Once created, some items cannot be edited / deleted
  - FNE License models, device series, device models
  - Used UAT extensively to avoid cluttering production
  - New UAT refresh period (semi-annually) makes experimentation more difficult (fewer opportunities to clean up mistakes)
- Some customizations of portal can be very expensive

# Lessons Learned – Recommendations for others

- Licensing is complicated and touches many departments
  - Significant time spent educating all affected parties including Sales, Marketing, Finance, Accounting, Operations, Engineering
  - Having one centralized owner makes execution much simpler
- Putting entitlements into “code” will uncover many surprises in knowledge of accounts
  - The more specific your licensing, the less flexibility allowed
  - Mapping historical activity into new licensing structure requires significant review and reconciliation
- Use UAT and test end-to-end from as early a stage as possible
- Build everything with transaction files, test everything with transaction files, then use same files for Production
  - Manual entry is error prone, hard to document, hard to repeat