



Mitigating the Risks of Software as a Service (SaaS)

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September 14, 2006

Learning Objectives

- 1 ➔ **The basics of escrow protection and the difference between traditional software licensing and subscribing to SaaS**
- 2 ➔ **Optimize the escrow protection by conducting disaster recovery due diligence**

Learning Objective #1

- 1 ➔ **The basics of escrow protection and the difference between traditional software licensing and subscribing to SaaS**

“Escrow” Defined

- **Escrow is a protection strategy. It is also the practice of securing access to property through a trusted, neutral third party under certain limited circumstances (triggering event, release condition, etc.)**
- **Parties include:**
 - **The Depositor:** The seller, also referred to in contracts as the developer, licensor, provider (“ASP”), grantor, etc.
 - **The Beneficiary:** The buyer, also referred to in contracts as the licensee, user, subscriber, grantee, etc.
 - **The Escrow Agent:** The neutral trusted third party, also referred to as the custodian, holder, agent, etc.

The Need For Escrow

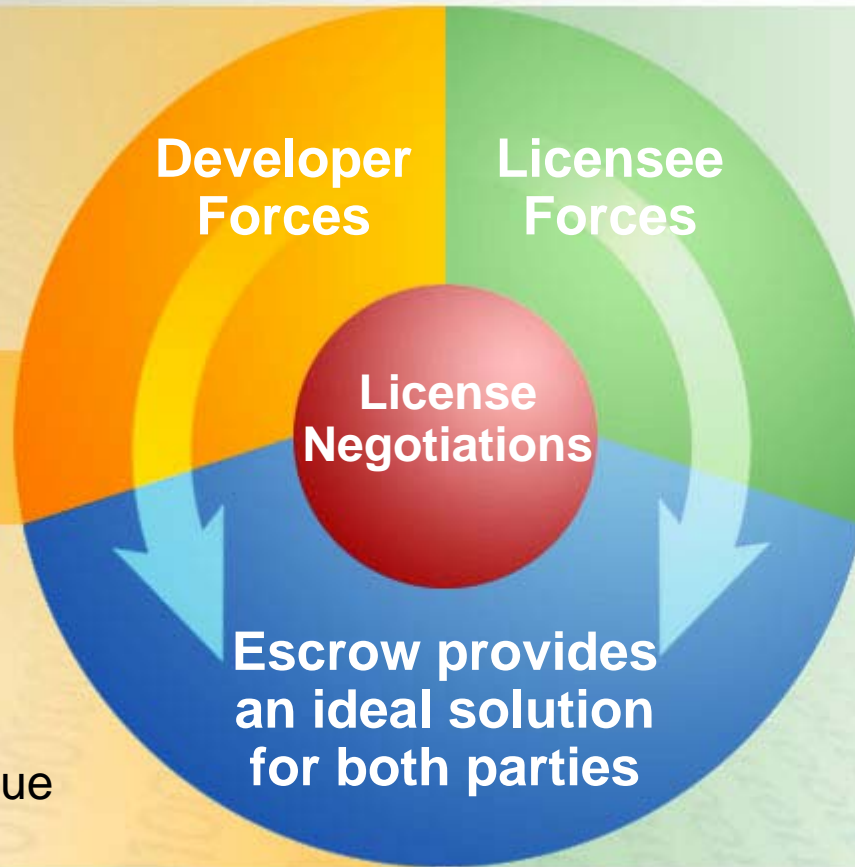
Developer Desires

- Credibility
- Short sales cycle
- Satisfy Client

Increased Competition

Desired Outcomes:

- Close deals
- Market traction
- IP protection
- Sustainable Revenue Stream



Licensee Desires

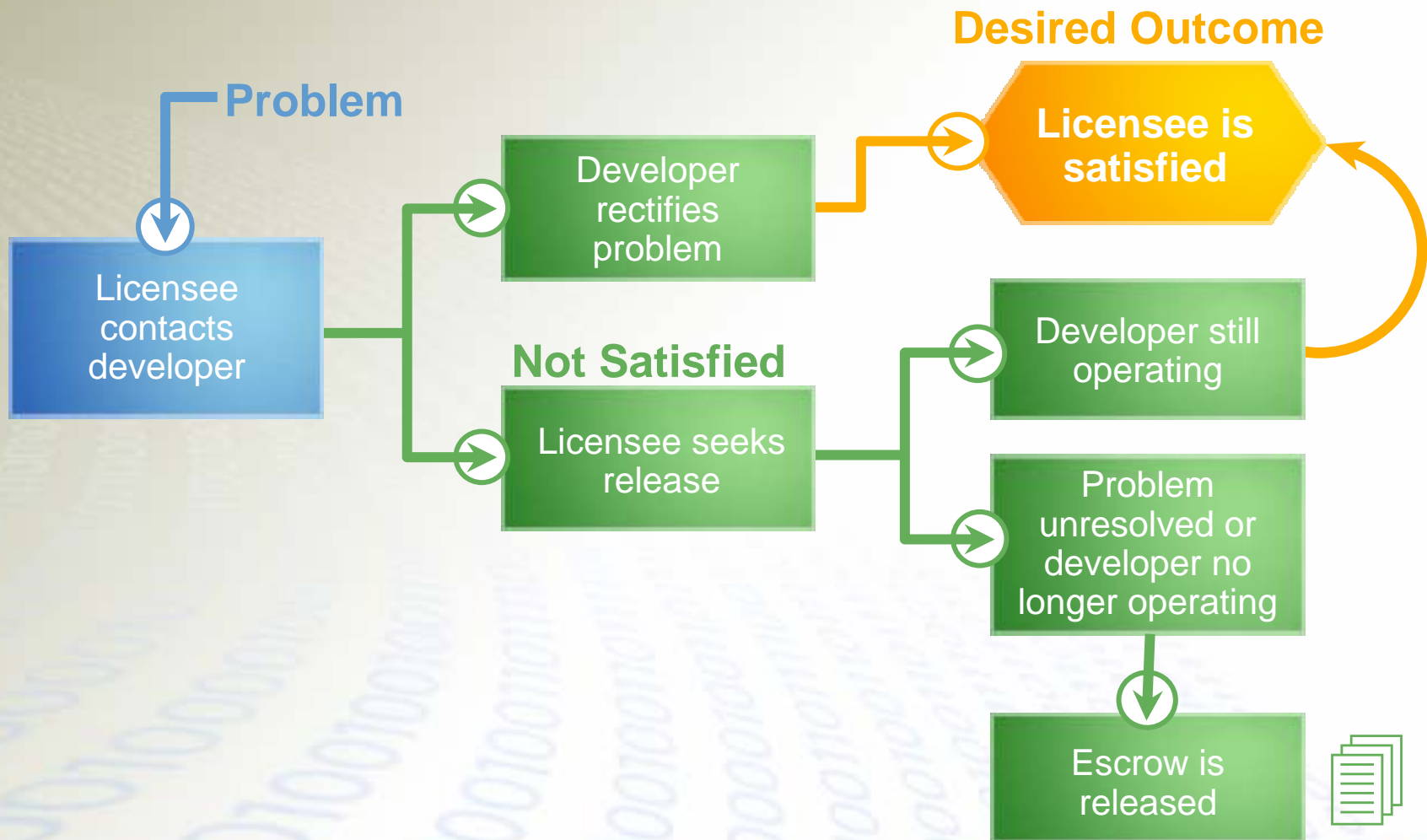
- Risk control
- Avoid litigation
- Improved end state

Business Pressures

Desired Outcomes:

- Controllable budget
- Leverage/support
- Access to code
- Long-Term Relationship

Leverage After the Agreement Is Signed



Traditional Licensing Scenario

Software developer delivers executable on media to the user



End user has a copy of the object code (executable)

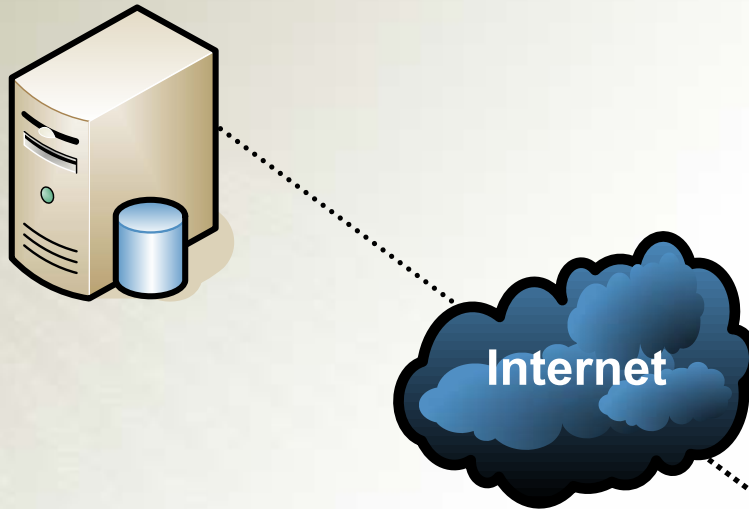
Access to source code is critical for a user to recreate and maintain the application development environment



User accesses software on local system

ASP Scenario

Application Service Provider



Users don't have actual software that they run in production. They don't have the executable running on their systems.

In order to protect themselves, a copy of the executable must be readily available along with their data to reload and run in a live production environment. Consequences without can be disastrous!



**User accesses
Software as a Service
(SaaS)**

Grim Reality

“Software as a Service” means you don’t have to invest in the infrastructure and people to maintain it. It could also mean that your business stops in the event of a service interruption. Can your business afford to stop?

ASP's: Source code Vs. Object code



Developer creates proprietary source code, which is converted into the object code & licensed out



Object code is the "executable" that runs on the licensee's computers



Without Source code the Licensee cannot maintain the Application on their own.



ASP's sell Software as a Service. Source code and Object code is proprietary. It is run on their machines and served up via the web



Users benefit from the application service: No maintenance, head count or infrastructure to manage



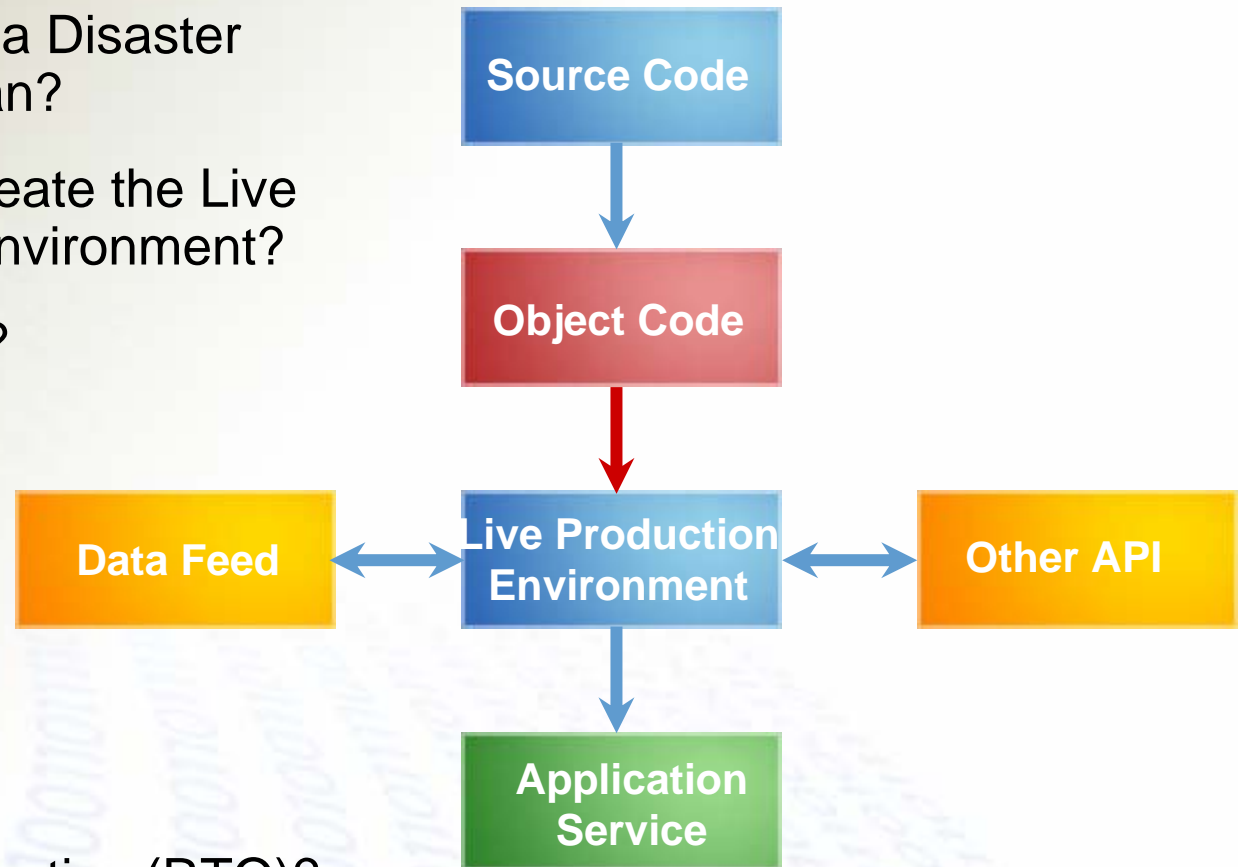
Users would have a Disaster recovery issue Without access to the Application executable.

Access to *source code* would enable the licensee to maintain the application without the Software Developer.

Access to the *object code* would enable the Subscriber to keep using the application without the Application Service Provider.

Recreating the Live Production Environment

- Do you have a Disaster Recovery Plan?
- Can you recreate the Live Production Environment?
- Does it work?



What's the...

- Recovery Time Objective (RTO)?
- Recovery Point Objective (RPO)?

Verification Due Diligence

An escrow arrangement is only as good as the quality of the deposit materials.

66% of all deposits sent in for analysis were determined to be incomplete



92% of deposits could not be compiled without additional input from the developer



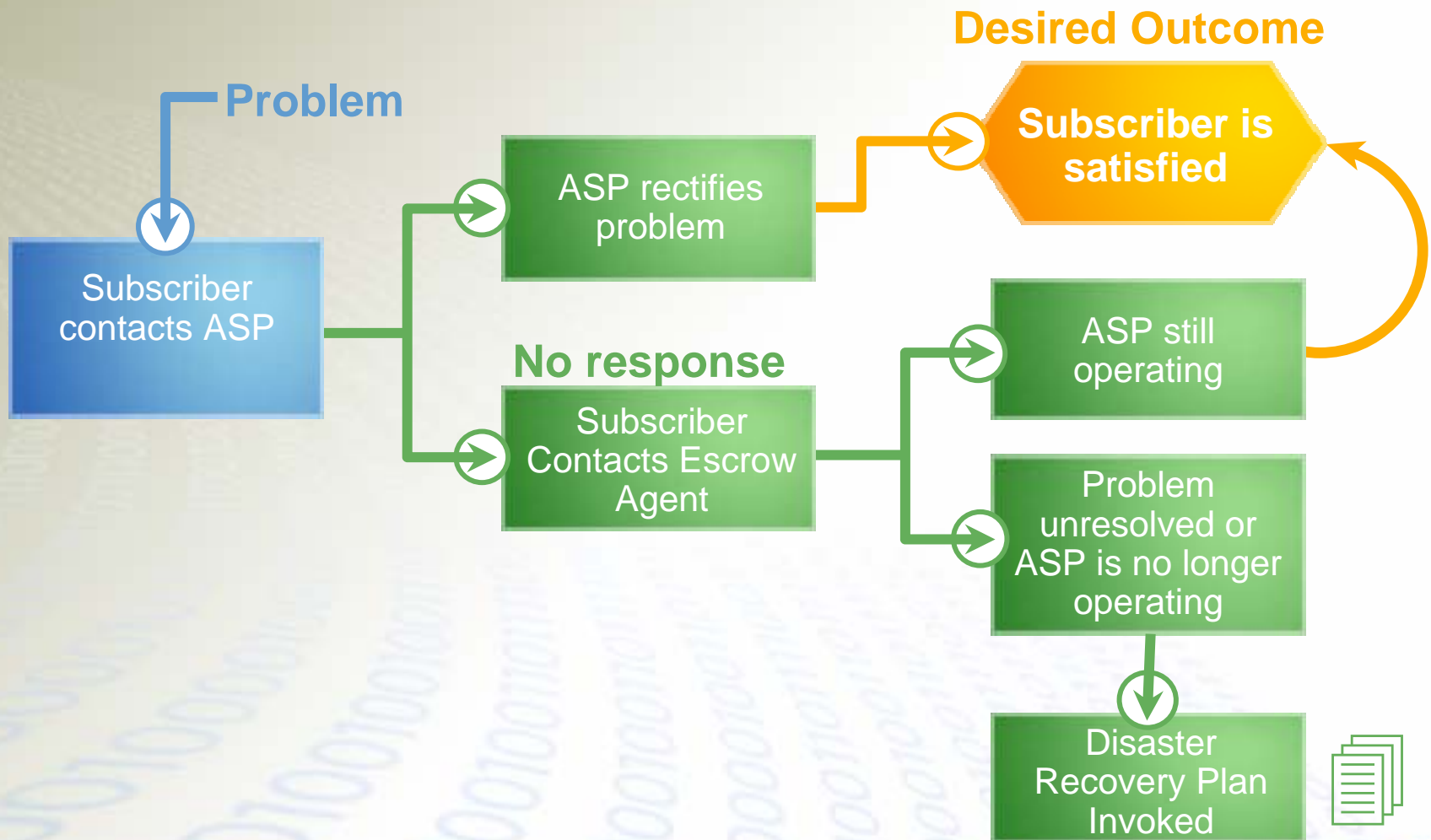
Verification of materials provides assurance that, in the event of a deposit release, a user would be able to more quickly and effectively recreate the live production (runtime) environment.

How Other Industries Verify

Sophisticated businesses reduce their risk when making significant investments

- Lenders examine collateral
- Purchasers of real estate do environmental surveys and appraisals
- Life insurance companies do physical examinations on every policy written

Invoking the Disaster Recovery Action Plan



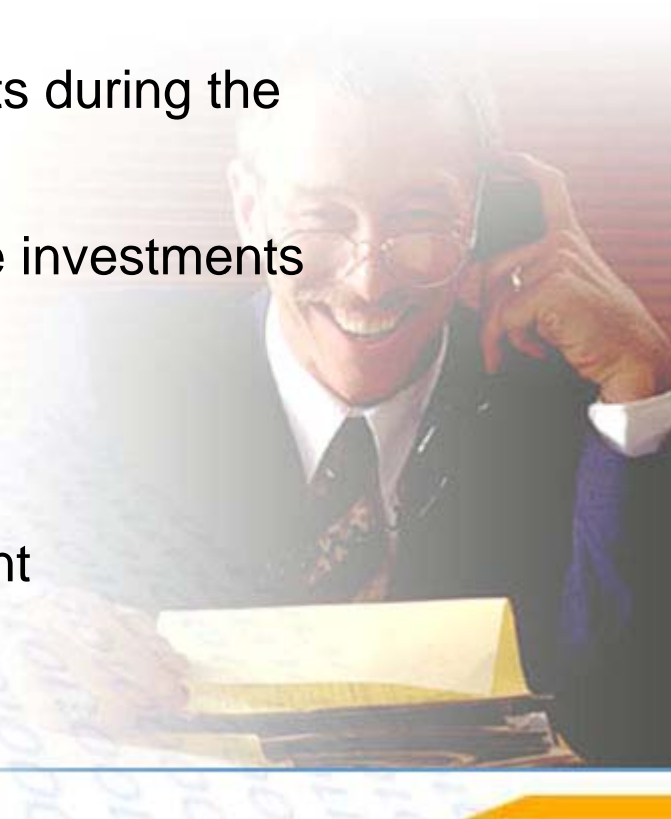
Learning Objective #2

2 → Optimize the escrow protection by conducting due diligence

- Negotiate the escrow agreement
- Demand release on object code (& data)
- Traditional release conditions on source code
- Verification testing on everything

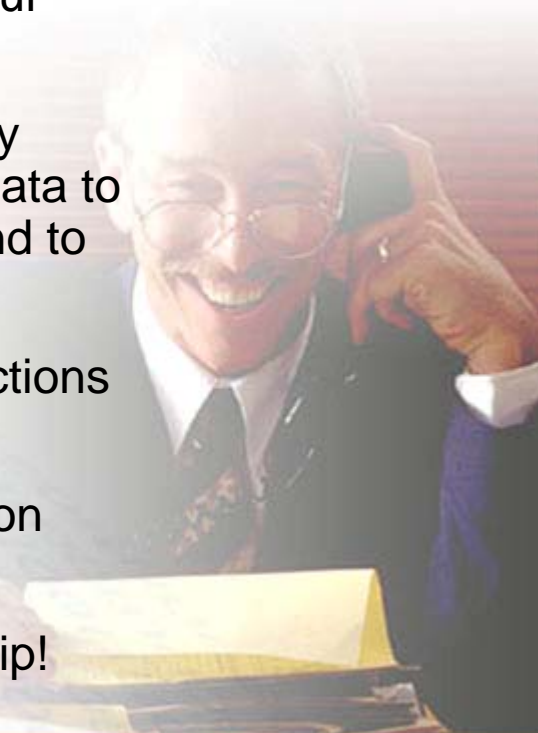
Executing your protection strategy

- Have a well documented, repeatable process for safely acquiring mission critical technology (traditional software and ASP)
- Start early – communicate your requirements during the Vendor Selection Process
- Budget for anticipated costs to protect these investments
- Use a well-worded agreement (YOURS!)
- Verify usability of the deposit materials
- Use a reputable & experienced escrow agent
- Properly manage the escrow agreement

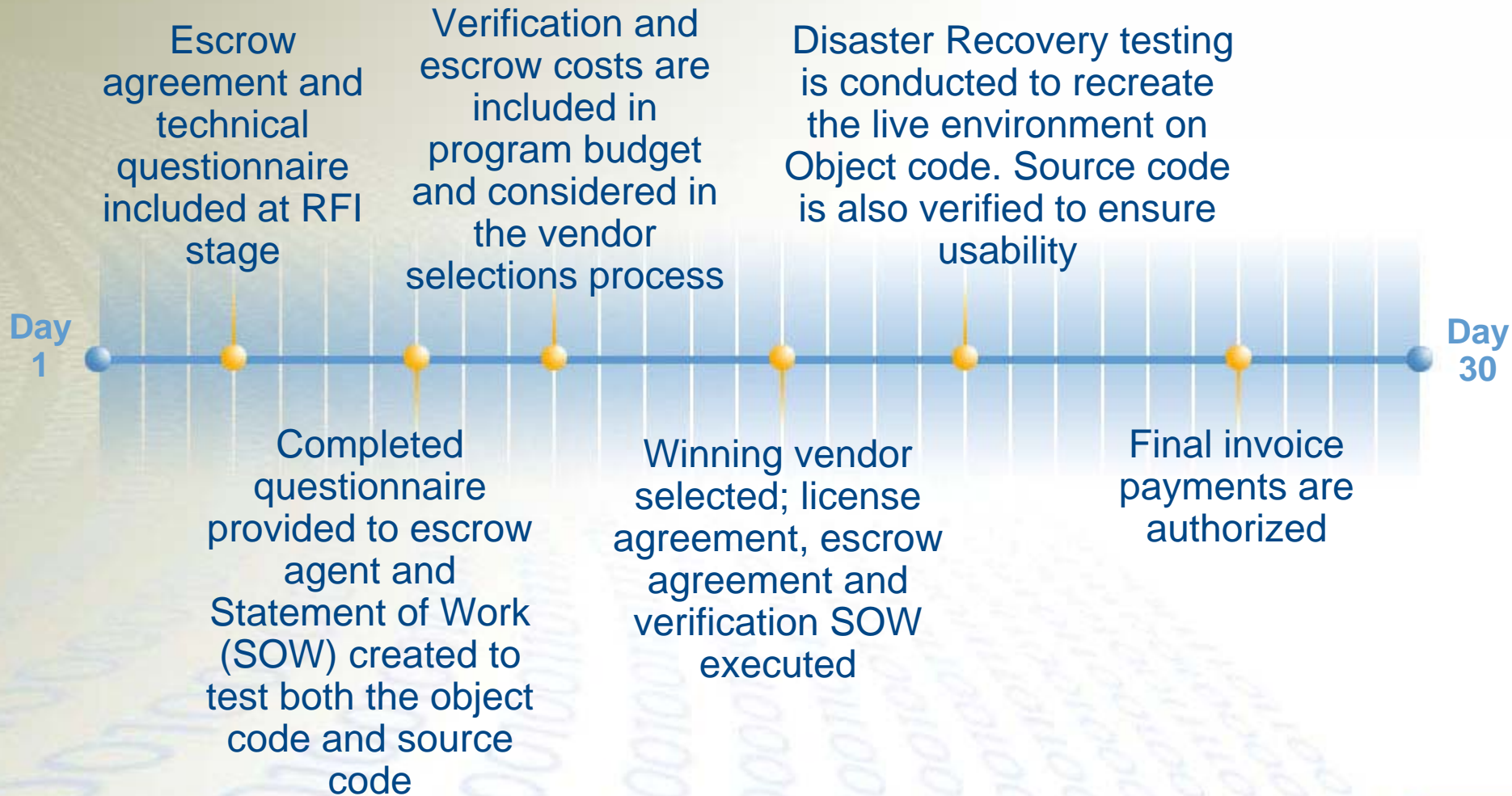


Protection Strategy - Continued

- As a condition for doing business, require strict adherence to guidelines set forth by your company's Disaster Recovery Plan
- Object code, "live production" build instructions and your data available on demand release with cause.
- Perform disaster recovery testing on the object code by recreating the live production environment using real data to measure the acceptable "Recovery Time Objective" and to determine the appropriate "Recovery Point Objective".
- Source code and application development build instructions available under traditional release conditions
- Verify the source code deposit upon every major version release
- Leverage the escrow to optimize the vendor relationship!



Best Practice Planning for Subscribers



Cost Benefit Analysis

**Cost to replace:
\$500,000 - ???**

**Escrow &
Verification/DR
Testing:
\$30,000 - \$50,000**

How To Identify Your Risk

Operational Dependencies

- Number of users
- Customer impact
- Lost productivity
- Lost revenue
- Public Safety

Costs

- Initial investment
- Subscription fees
- Retraining
- Customization
- Other API
- Hardware

Risk Factor

Determine what level of software escrow protection is needed and how serious you should consider your escrow agreement

Investment of Time

- Availability of substitute products?
- Time to identify new product
- Time to negotiate new deal
- Time to retrain

Vendor Assessment

- Vendor stability
- Subcontractor partnerships
- Breadth of product lines
- Commitment of staff

Recap: Actionable Guidance!

Legal Expertise

Read
escrow contract!

Object code = Demand Release
Source code = Normal Release

Technical Expertise

Verify
the escrow deposit!

DR Test the Live Environment
Compile test on the Source code

You need to do both to get it right. If something is not right, take corrective action at once. Consider the alternatives of failure and how they impact your organization.

Select a Reputable Agent

Qualitative Conditions

- Have a proven reputation as a trusted third party
- Have a strong background in internal verification testing
- Have experience in administering a significant number of releases and agreements
- Instant accessibility to critical information

Quantitative Conditions

- Carry professional liability insurance
- Operate their own IP media vault
- Have built in redundancy for operations and IT infrastructure
- Have in-house legal advisors to help advise on process
- Solid financials

Quick Stats on Iron Mountain IPM

- **5,000 + Deposit Accounts**
 - **50,000 + Contract Parties as Clients**
 - **Clients in 73 countries worldwide**
 - **Only provider with on-line portal access**
- **94% of the Fortune 500**
 - **88% of the Fortune 1000**
 - **74% of the Software 500**

Iron Mountain At a Glance

Iron Mountain Solutions

Customer Benefits



- Records Management
- Health Information Services
- Digital Archives
- Consulting
- Secure Shredding
- Fulfillment (Comac)

Records Management

- ✓ Reduced Cost
- ✓ Easy Access
- ✓ Management & Control
- ✓ Risk Management
- ✓ Compliance



- Off-Site Data Vaulting
- Electronic Vaulting
- Consulting

Data Backup & Recovery Services

- ✓ Protection of Backup Computer Data
- ✓ Currency of Backup Data
- ✓ Rapid Restore
- ✓ Process Discipline



- Technology Escrow
- Domain Management Services
- Vital Records Protection
- Film & Sound Archives
- Custom Environments

Information Protection & Preservation

- ✓ Privacy & Security
- ✓ Software Licensing
- ✓ Long-Term Preservation

Thank you!

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