

PrimeCode[®]

Software Configuration Management
for HP NonStop

CROSSPAC

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CROSSPAC

- CrossPAC Software B.V.
 - The Netherlands
- Distributor 3rd party software
- Support and Helpdesk
- NetWeave
- PANORAMA
- XML Thunder
- PrimeCode

NetWeave

- Communications Middleware
- Message Passing / Queuing
- Remote Databases / Transactions
- HP NonStop
- UNIX
- Windows
- other HW

PANORAMA

- Source Code Analysis
- Programs / JCL
- High Level of Detail
- All platforms
- Most Languages
- Windows/UNIX client - UNIX server

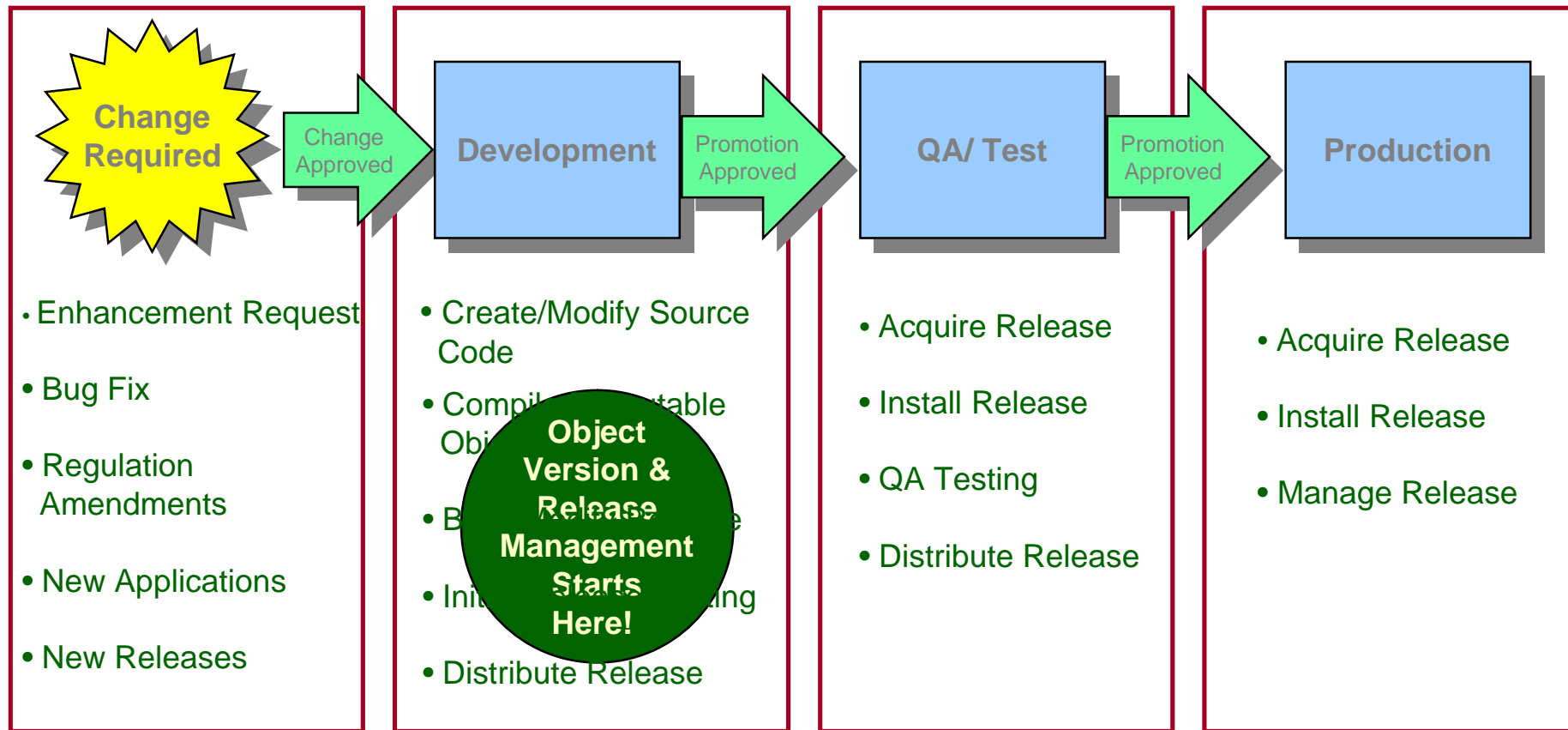
XML Thunder

- XML Enable Legacy Applications
- COBOL and C
- Native Gaurdian
- Minimal Program Changes
- Full XML Implementations
- XML Enable Apps in hours
- SEPA Compliant in Weeks

Software Configuration Management

The process of managing the development, change, distribution and installation of software applications throughout the entire software life cycle.

Software Life Cycle



Referential Integrity: Develop and Package

1. Create/Modify Source Files

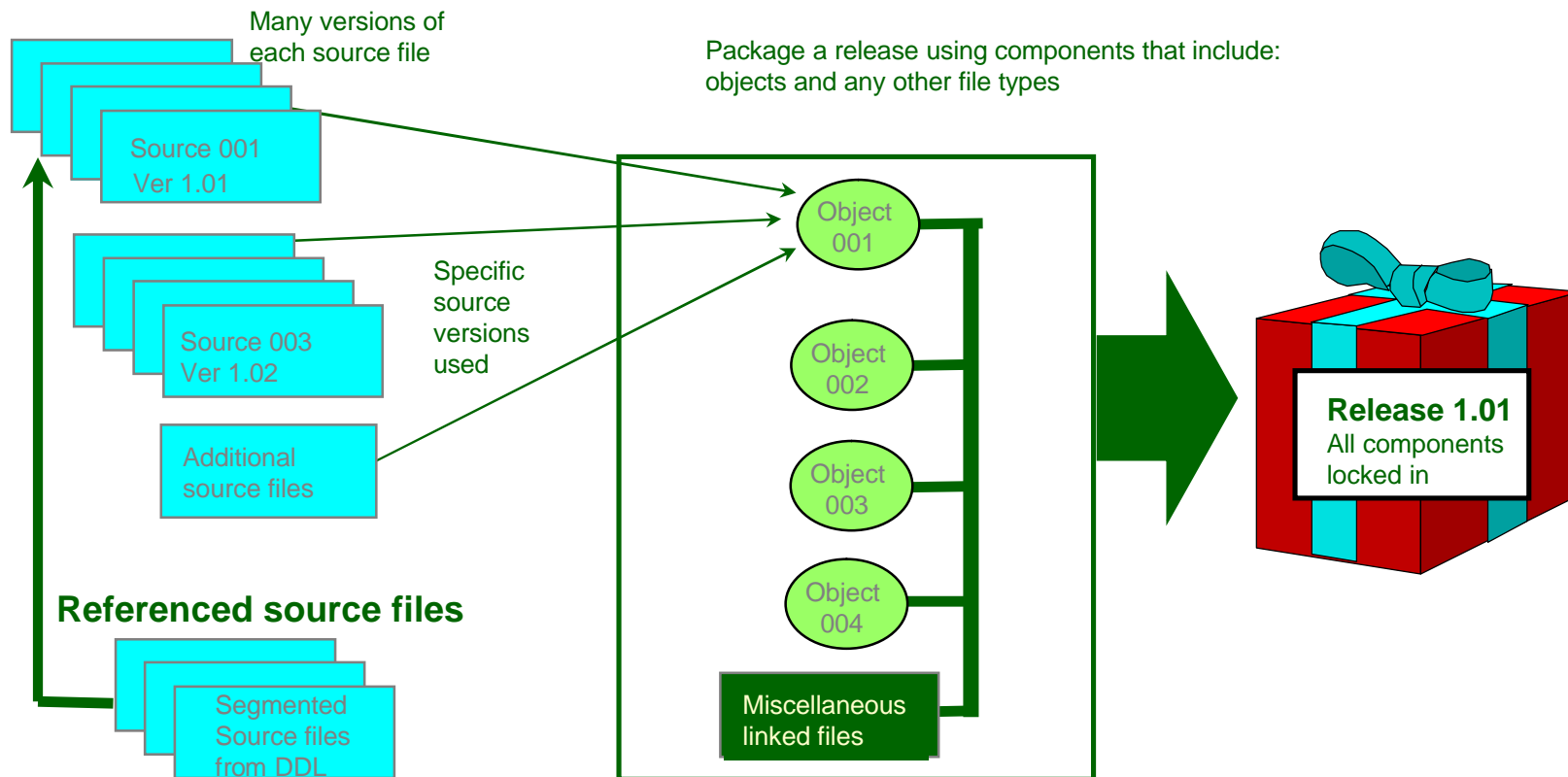
- multiple versions of each
- could have dependencies

2. Compile Objects

- performed by PrimeCode
- all references known
- all references/compiler locked

3. Package Release

- contains objects plus all references
- include any files types (eg. pics/docs, etc.)



Referential Integrity:

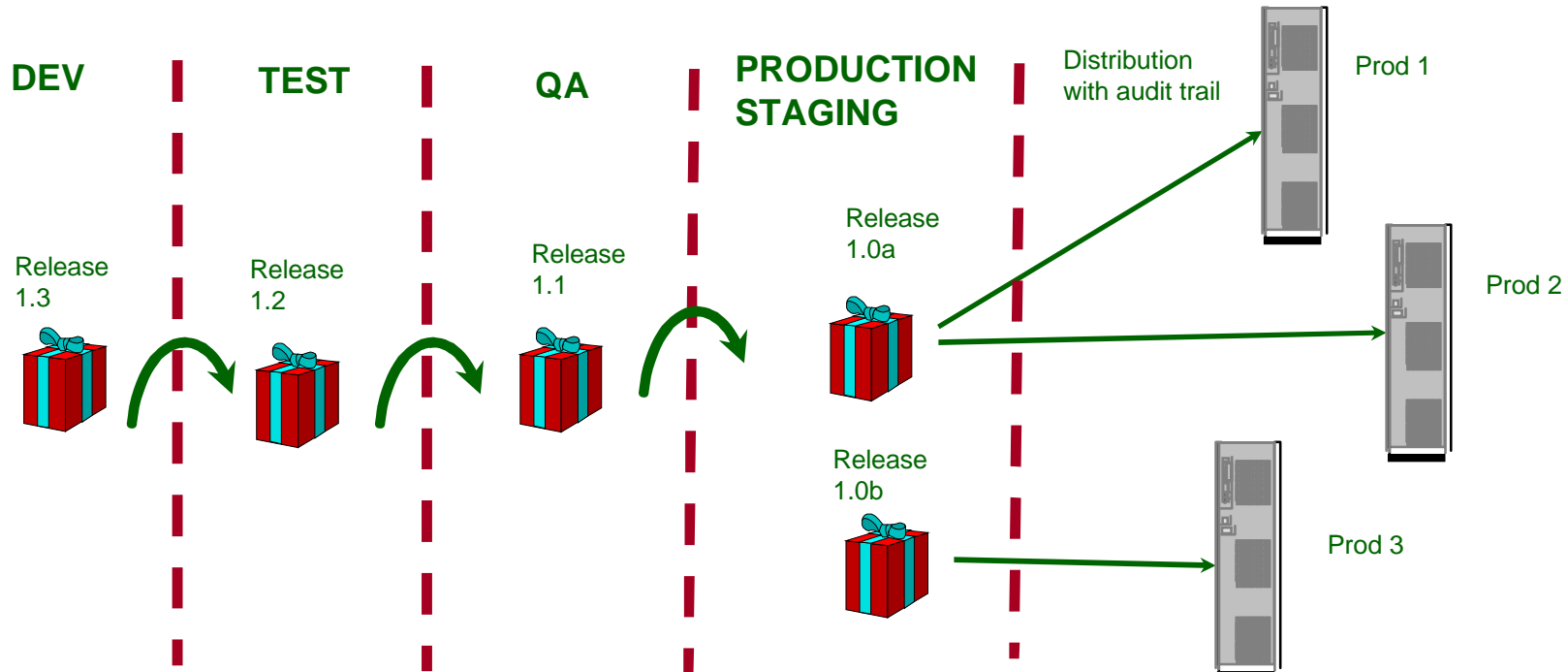
Promotion and Distribution

4. Promote Releases

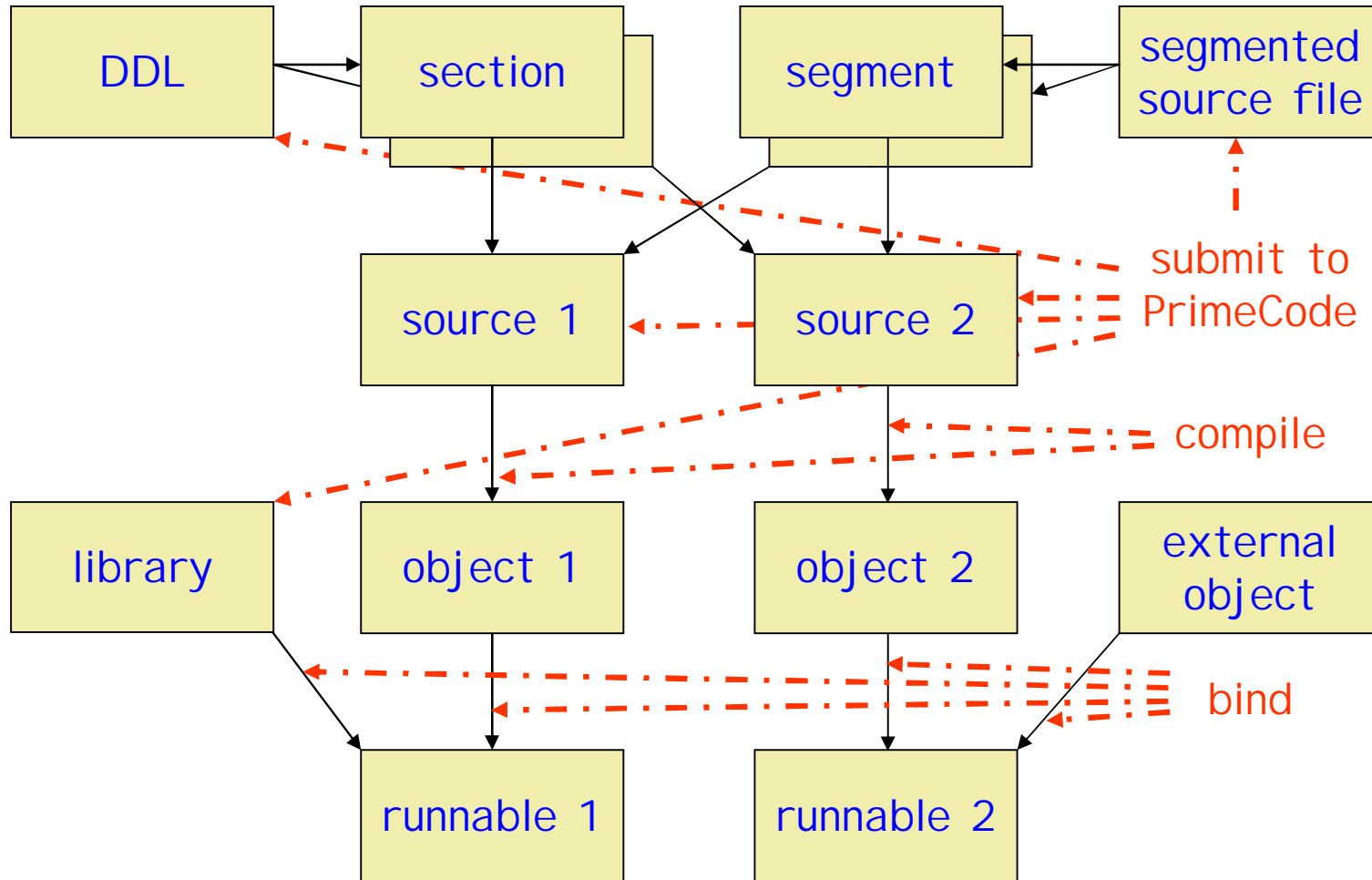
- custom security access per environment
- all references/compilers locked

5. Distribute Releases

- all source/object versions known
- no missing components from QA



Managed component structure



Managed component references

- All references managed automatically;
- DDL: individual sections;
- Source references created during submit to PrimeCode;
- Object references created during compile;
- Runnable references created during bind;
- Objects recompiled only when needed;
- Massive reduction of test time;
- Impact analysis;
- User changes.

User changes

- Group source changes;
- Manage as a single entity, not as many individual sources;
- Compile / promote / install;
- Multiple concurrent user changes;
- Increased manageability of development process

Why use SCM?

Most outages are caused by
planned changes

Why use SCM?

- Audit compliance;
- Improved reliability;
- Cost savings/improved productivity;
- Reduce downtime;
- Prevent fraud;
- Facilitates change impact analysis;
- Manage risk of doing business.

Audit Issues

- Reproducibility of applications;
- Audit trail of changes;
- Division of responsibilities;
- Secured repository access;
- ENRON spawned Sarbanes-Oxley:
 - *"SOX gives us a headache"*;
- SocGen to spawn new requirements?

Reducing errors

- Multiple versions: Which is the correct one?
- Change source: Easy to forget bug fix;
- Change source: Which applications are affected?
- Releases: Are the right pieces included?
- Bug fix: Is it included in Prod & Dev?
- Changed make file? Can't reproduce object;
- Multi user fix? May overwrite other's change.

Costs savings

- More efficient through fewer errors/better management;
- Automated process;
- Reduce *potential* for downtime (risk management);
- Reduce *actual* downtime:
 - less searching is required,
 - no components to re-create,
 - easier analysis possible.

PrimeCode Features

- Manages **ALL** Types of Components;
- Manages **Relationship** Information;
- The only **End-To-End** Solution
Specifically Designed for HP NonStop.

Product Structure

- Core system on Guardian ("RMS");
- Repository in Enscribe files
- GUI front end on PC (PrimeCode);
- Full support for OSS / Integrity;
- ALL languages supported:
 - COBOL, SCOBOL, C, C++, TAL, Java, ...;
- Guardian security + internal security

PrimeCode versions

- **UltraLite** includes
 - Source version control only,
 - DDL granularity;
- **Lite** also includes
 - Managed compiles,
 - User changes;
- **Full** also includes
 - Releases
 - Install / distribute / acquire
- Smooth upgrade path

Optional Modules

- ACP:
 - Automated Change Policy
- CRW:
 - Custom Report Writer
- RTC:
 - low cost, low impact RSC replacement

Third Party Applications (Examples)

- ACI BASE24
- Logica BESS
- Alerie ATLAS
- eFUNDS ADVANTAGE

Major Benefits

- AUDIT COMPLIANCE
 - Sarbanes-Oxley
- RELIABILITY
 - of software applications
- PRODUCTIVITY
 - in development, testing and production support
- MANAGE RISK
 - of “planned” software changes

PrimeCode European Customers

(Partial list)

- ATOS/Euronext
- Banksys
- BBS
- Belgacom
- La Caixa Barcelona
- Caja de Madrid
- Crédit Agricole
- Deutsche Bank
- Equens
- Euroclear
- HSBC
- ING Bank
- KPN Telecom
- LloydsTSB
- Nationwide
- Rabobank
- Royal Bank of Scotland
- Société Générale
- Swedbank

PrimeCode American Customers

(Partial list)

- ABN AMRO
- Alerie
- AT&T
- Bank of America
- Bank of Nova Scotia
- Chicago Mercantile Exchange
- CIBC
- Comerica
- Hertz
- MasterCard
- New York Board of Trade
- Sungard Financial
- Toronto Stock Exchange
- US Bank
- Wachovia
- Wells Fargo

PrimeCode versus simple version control

- Manage objects as well as sources;
- PrimeCode managed component structure:
 - Versions/states/bugfixes/DDDL granularity
- Users of version control only tools move to PrimeCode due to increased auditing requirements (e.g. Sarbanes-Oxley);
- With mergers, all mixed environments have converted to PrimeCode;
- No conversion away from PrimeCode ever.

Customer testimonial #1

- Top 5 US Brokerage firm;
- Bi-weekly bug fix releases;
- Frequent problems with releases proved difficult and time-consuming to analyze and fix;
- In 2½ years of using PrimeCode, not a single software release problem encountered.

Customer testimonial #2

- Top 10 US Bank;
- BASE24 from test to production without full testing;
- Errors often took weeks to fix;
- With PrimeCode, problems completely eliminated due to tight QA control over release contents.

PrimeCode is for
HP NonStop

what Endeavor is for
IBM Mainframes