CLM 5.0 iFix
Plan and Process

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Agenda

Background:

- Change - cumulative iFix (w/ patch) to replace test fix (a.k.a. hot fix)

Focus of today:

- **Maintenance scope & governance**
- **5.0 iFix dev process**
- 5.0 iFix001 Schedule
- **Support from dev team**

Future:

- Maintenance Cadence (Proposal)

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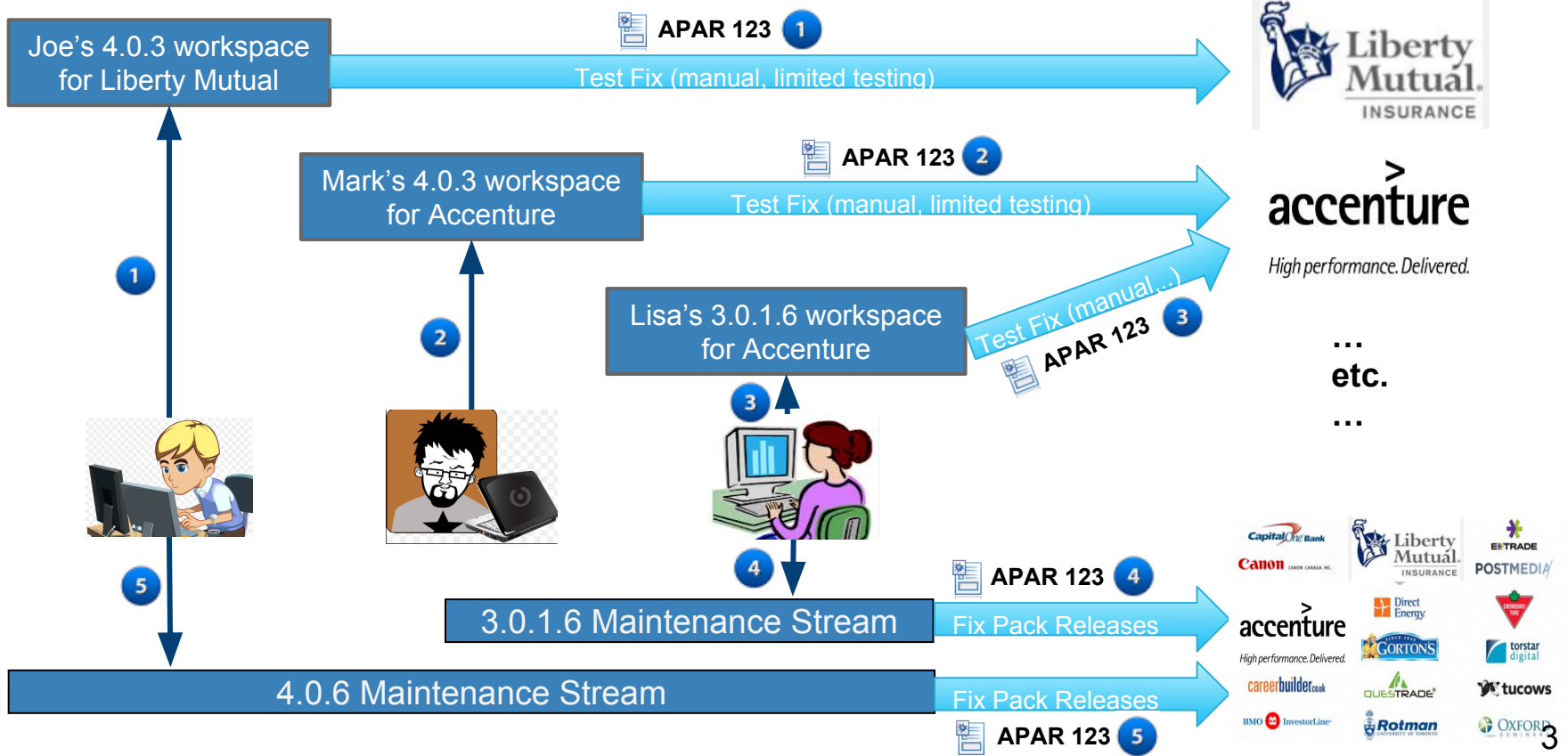
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Change: CLM Maintenance Today
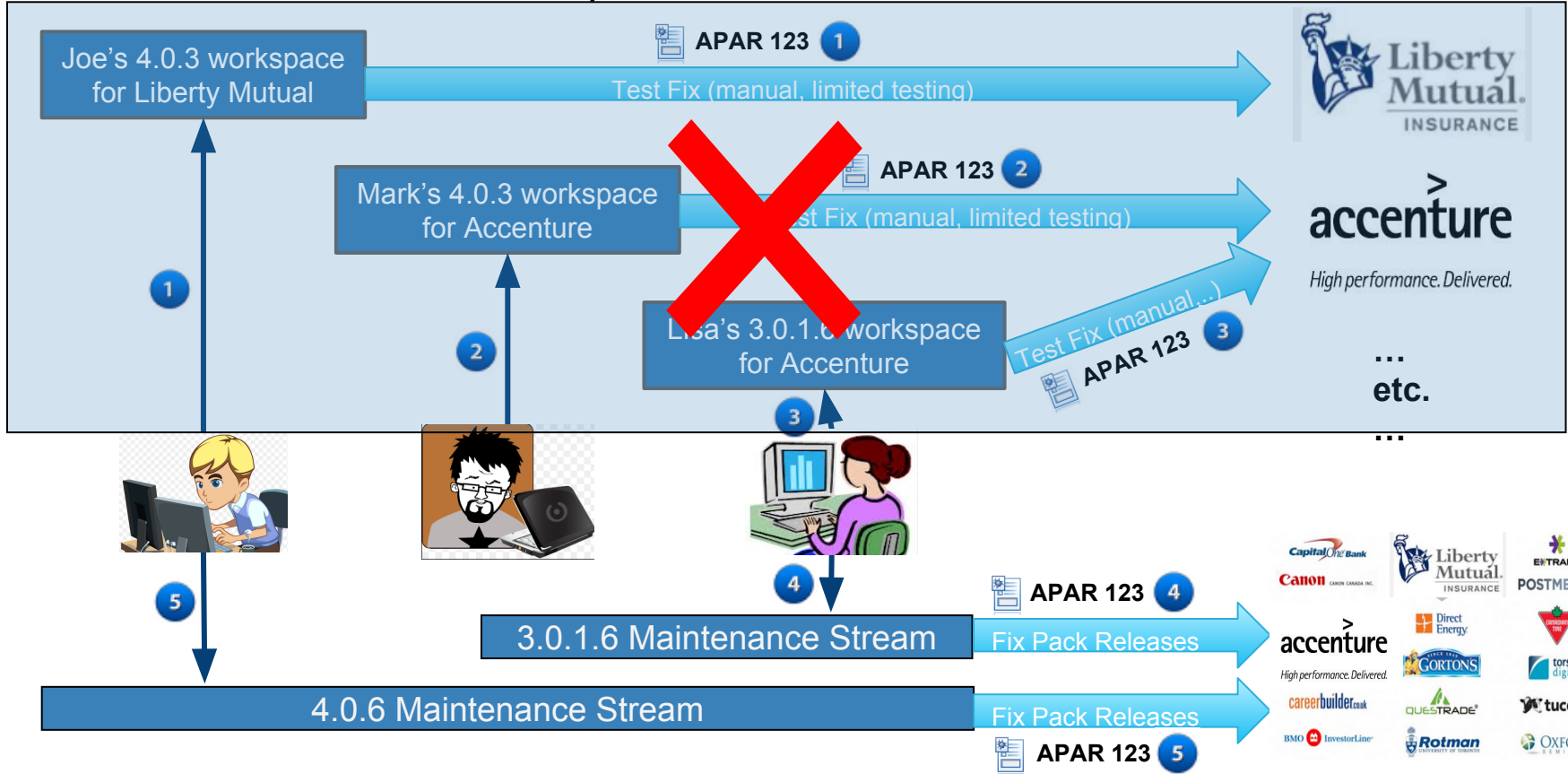
Cost of delivery for *one* APAR

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Change: CLM Maintenance Today

L3 customer deliveries

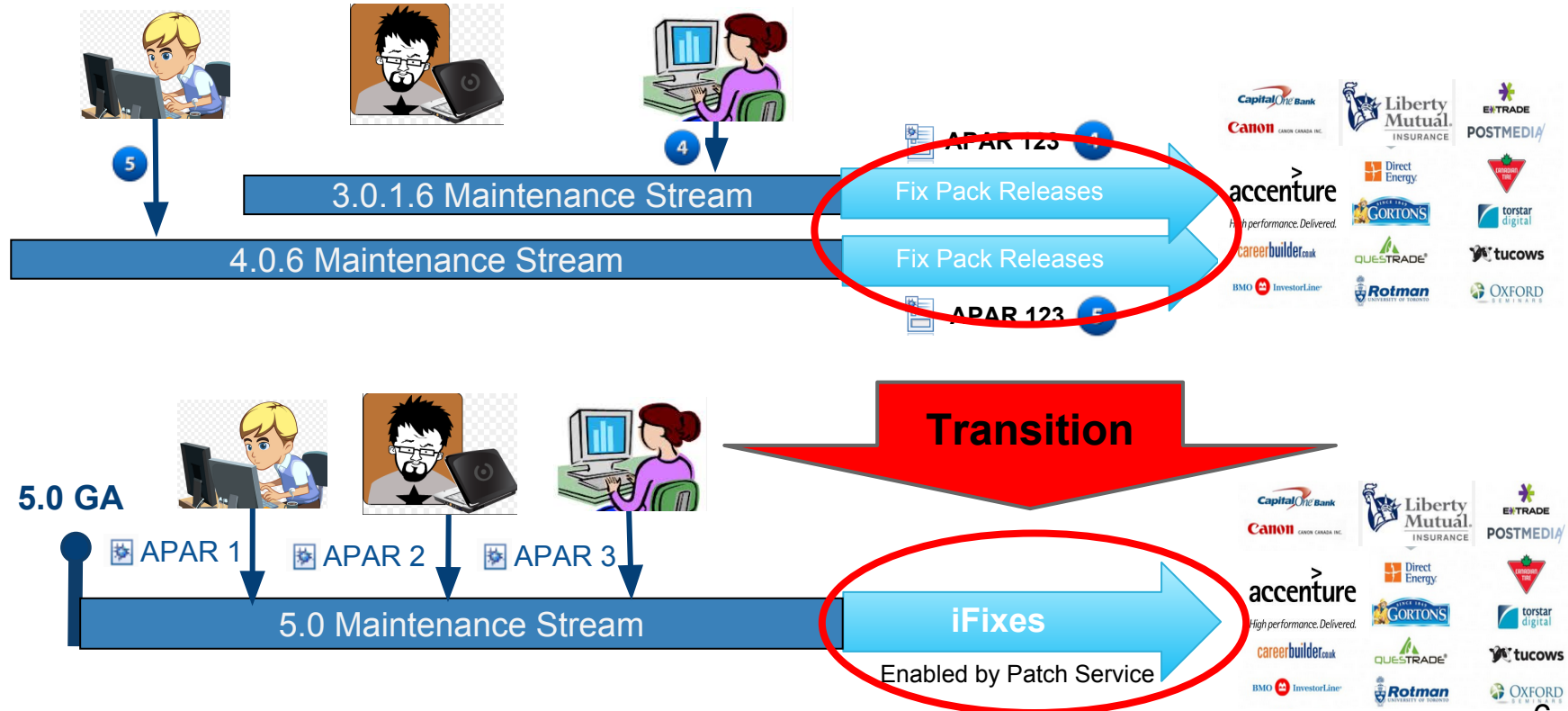|	*2012*	*2013*	*2014 Projection*
Test Fixes	286	621	760
Fix Packs	6	3	6 - 10
Escalations	2158	2132	2400

Change: CLM Maintenance 5.0

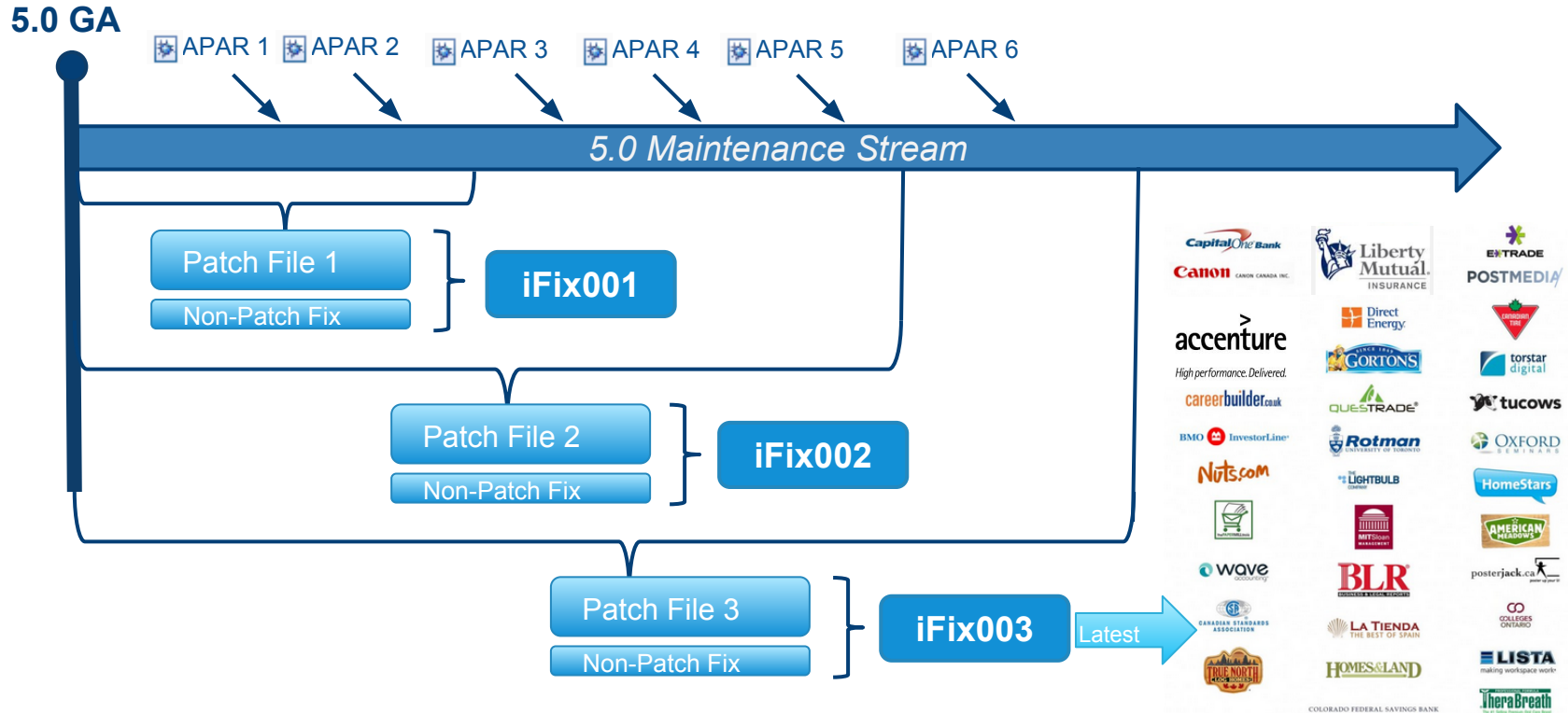*1. Remove customer unique test fix*

Change: CLM Maintenance 5.0

2. Reduce development cost, dramatically

Change: CLM Maintenance 5.0
3. iFix: agile, automatic, cumulative & continuous

Change: iFix Customer View
1. Test Fix v.s. iFix

Test Fix (Today)	iFix (5.0)
1. individual fix	1. reactive fixes + proactive fixes
2. limited Testing	2. full testing, high quality
3. Apply: manual replace each plugin jar file, change server install	3. Apply: drop one CLM patch file, no change to existing install
4. Hard to track applied fixes	4. Readme file clearly list all fixes
5. need all fixes all the time	5. only need the latest iFix at any time
6. Prone to regression when upgrade	6. Clear upgrade path to prevent regression
7. Hard to remove fixes, impact install	7. Simply remove patch file, no impact to install

Change: iFix Customer View
2. FixPack v.s. iFix

FixPack (Today)	iFix (5.0)
1. Full upgrade & migration required	1. Drop one CLM patch file
2. Expensive, risky to adopt	2. Simple, no risk to adopt
3. Includes JRE, Tomcat updates	3. Self-serv JRE, Tomcat update w/ instructions
4. No Continuous Test Coverage	4. Continuous Test + Regression Test
5. Slow turn-around	5. Faster, Agile, Cumulative, Continuous.

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iFix Scope and Governance

Scope:

- APARs
- High severity defects impacting all customers
- Security fixes (PSIRT)

Governance Policy:

- No model or DB schema changes
- No API breaking changes
- No changes that break migration or n-1 compatibility
- No feature work or enhancements
- No version number changes
- No system requirements change
- Fixes must be available in the next GA release. (Fixes should always happen in main stream then backport to maintenance streams)
- No instrumental changes for debugging purpose.

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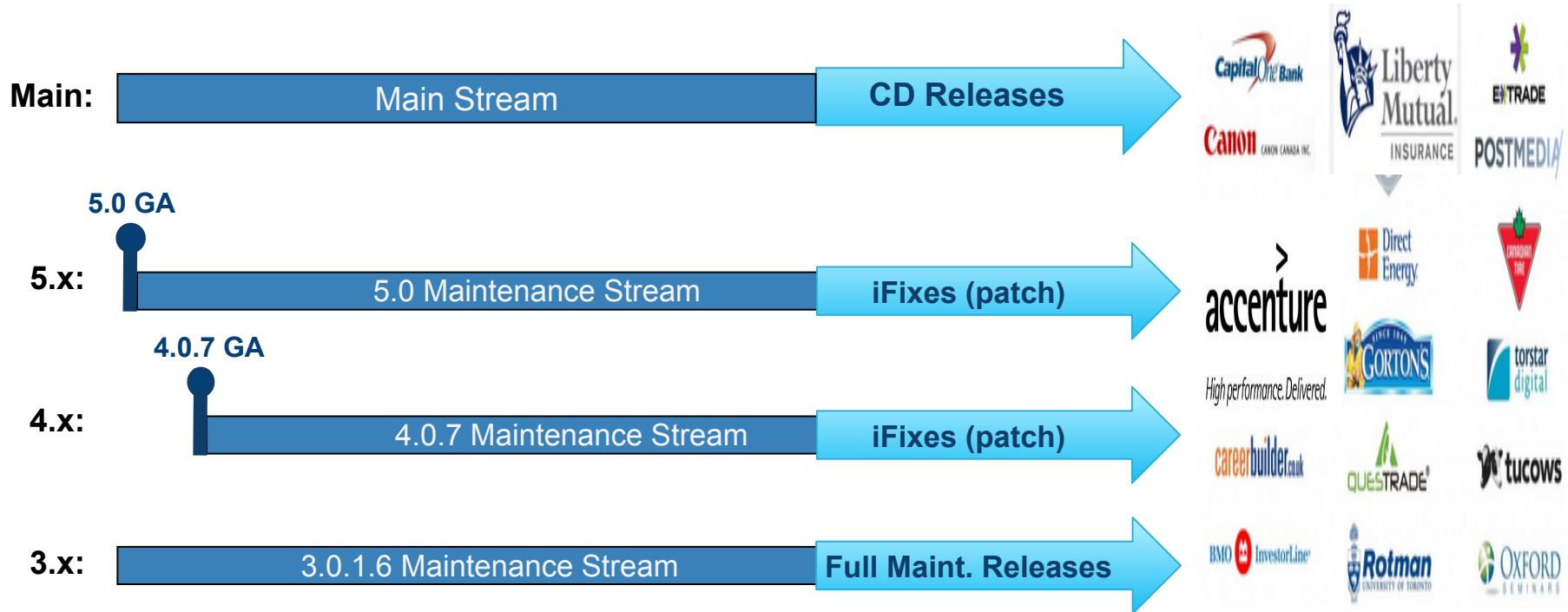
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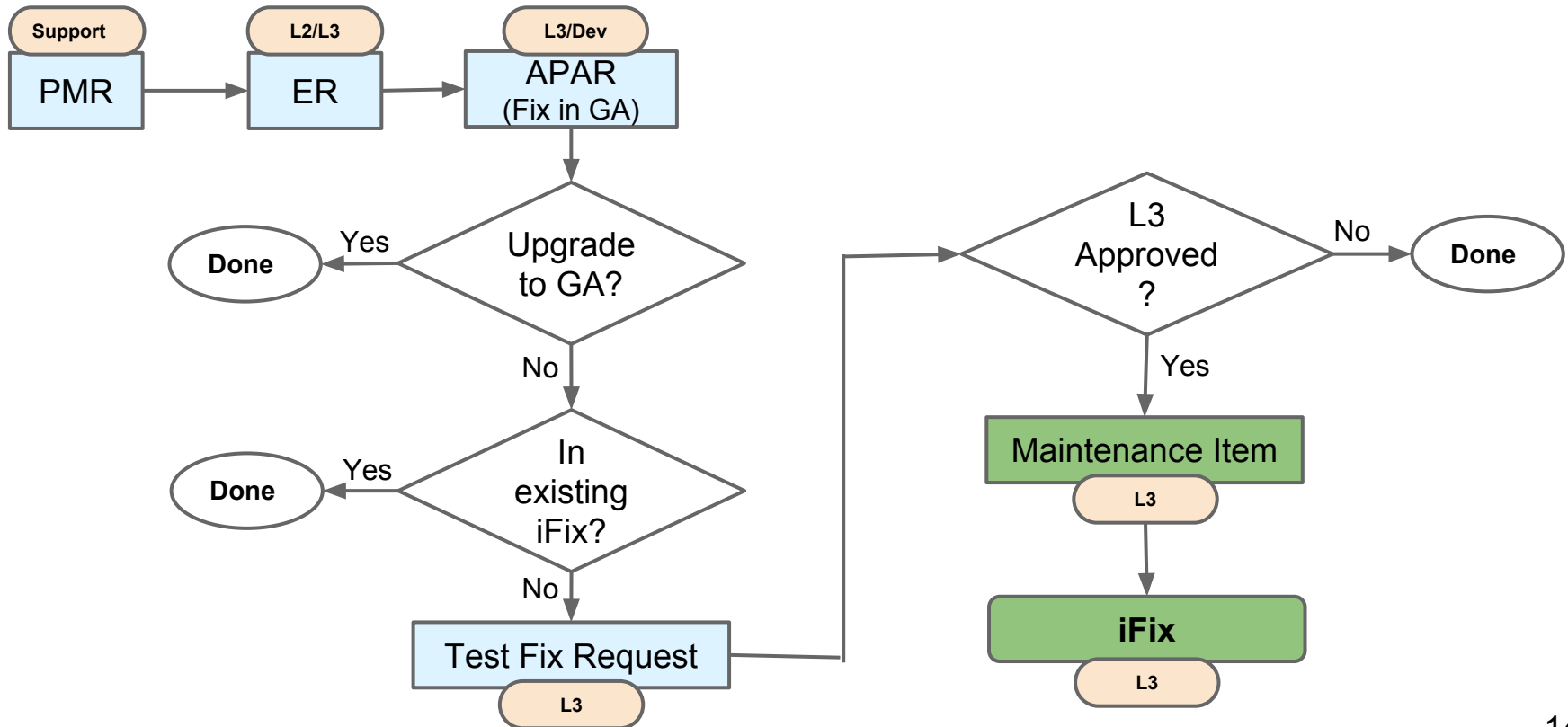
- Maintenance Cadence (Proposal)

5.0 iFix Dev Process

1. Main & Maintenance Streams

Main: Main Stream — **CD Releases**

5.0 GA

5.x: 5.0 Maintenance Stream — **iFixes (patch)**

4.0.7 GA

4.x: 4.0.7 Maintenance Stream — **iFixes (patch)**

3.x: 3.0.1.6 Maintenance Stream — **Full Maint. Releases**

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5.0 iFix Dev Process
2. L3 APAR work flow

5.0 iFix Dev Process

3. Tracking: Maintenance Item

- Each approved test fix request *MUST* has a Maintenance Item.
- Link type "Tracks".
- Deliver to maintenance streams, no more test fix out of private workspaces.
- customer deliverables are result of official build
- Formal testing
- Formal planning and tracking
- Predictable schedule
- No more customer unique workspaces maintained by each developer for each supported release
- No more risk of change conflicts or fix overwrites

5.0 iFix Dev Process

4. Automation: patch file + readme.txt

5.0 iFix Dev Process

5. Maintenance Test
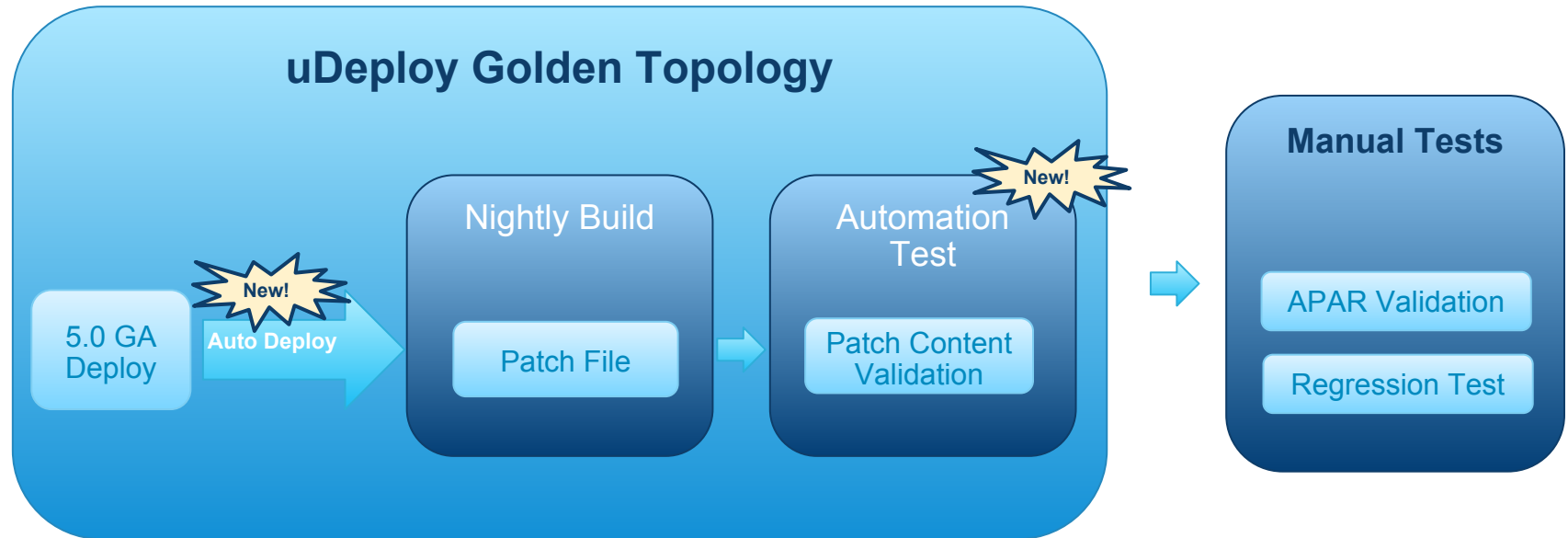
5.0 iFix Dev Process

6. Continuous Test (Planned)

APAR Fixes

Automation Pipeline

Build

Build

Unit Test

Patch File

Patch Deploy

New!

Automation Tests:

- Patch content validation
- BVT
- Scenario tests
- Performance Tests

Manual Tests

APAR Validation

Regression Test
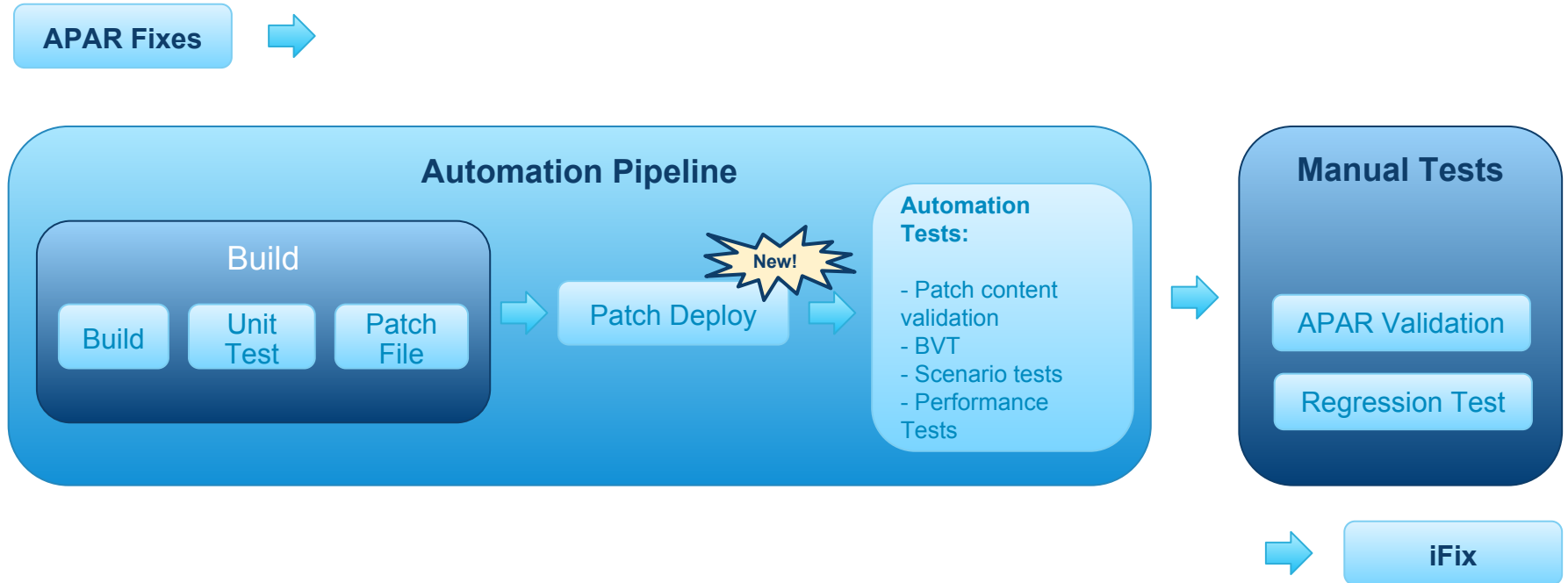
iFix

5.0 iFix Dev Process

7. Continuous Test (Future)

APAR Fixes

Full Automation

Build

Build | Unit Test | Patch File

Patch Deploy

Automation Tests:

- Patch content validation
- BVT
- Scenario tests
- Performance Tests
- **APAR validation**
- **Regression Tests**
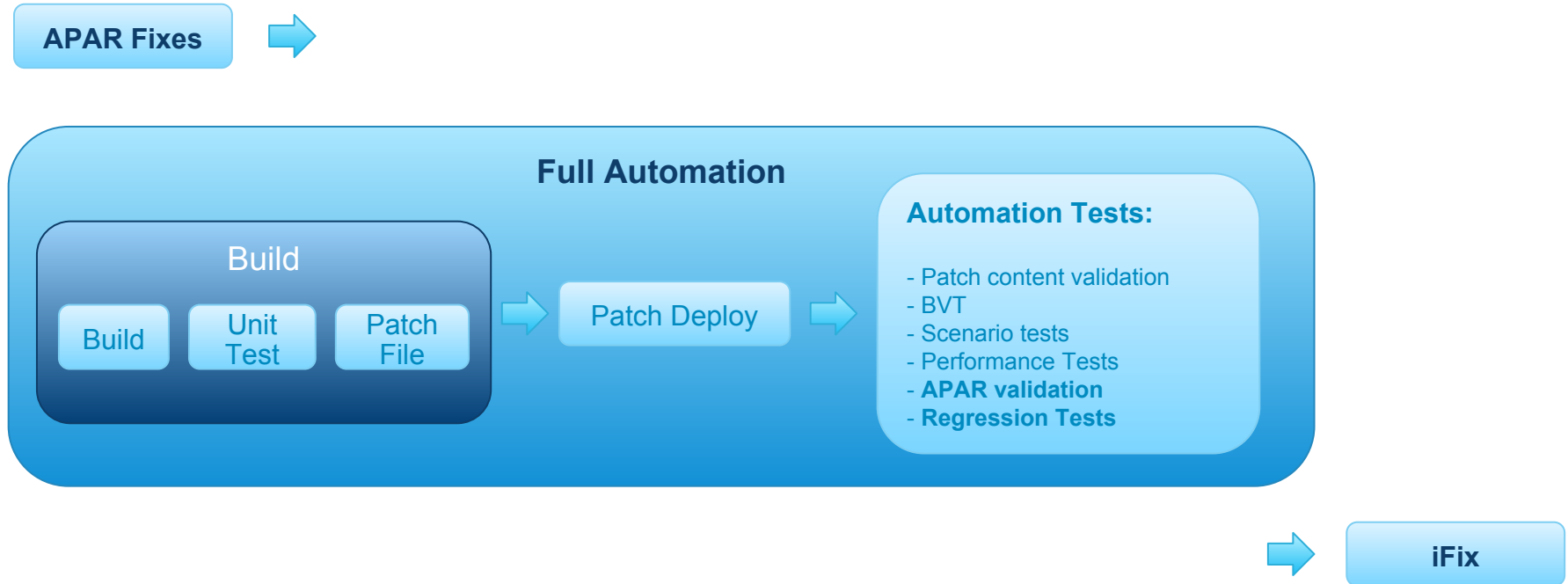
iFix

5.0 iFix Dev Process

8. Four-week cycle

- Week 1: dev and apar validation
- Week 2: dev and apar validation

  ** Self Hosting Ready **

- Week 3: regression testing only
- Week 4: final, publish

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5.0 iFix001 Schedule

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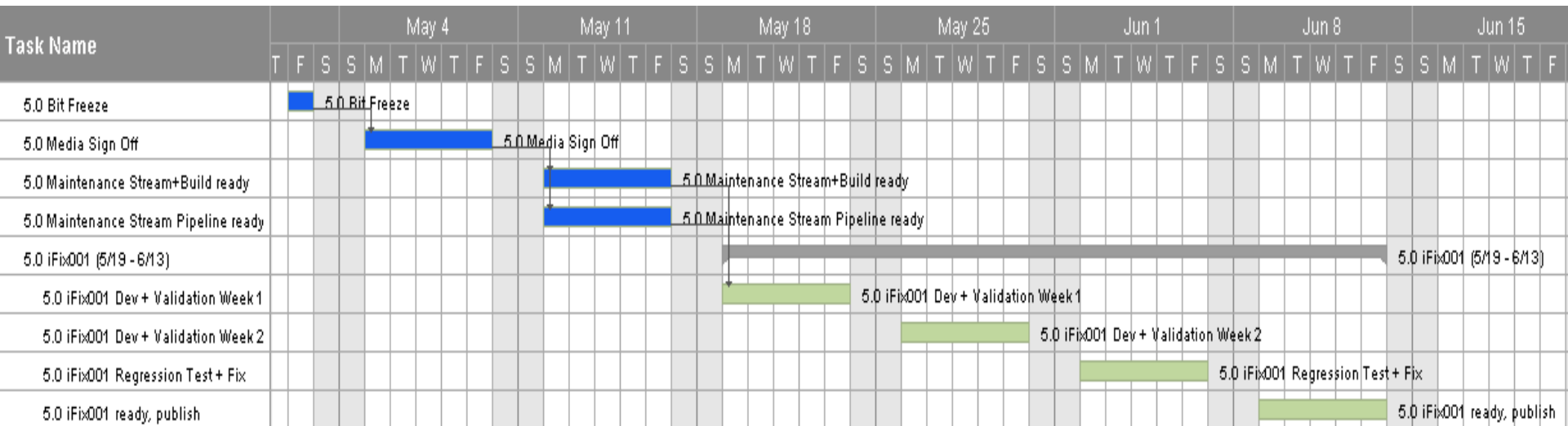- Change - cumulative iFix (w/ patch) to replace test fix (a.k.a. hot fix)

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Support from Core Dev Team

1. **Test Cases**: come with APAR fixes for validation - automation / manual
2. APARs are fixed on main stream first. *Ideally* they are also tested via a full milestone testing cycle. But sometimes backport happens before full regression test.
3. **Risk Mitigation** for incomplete fixes/regressions:
   a. **L3 dev** makes sure APAR defect is linked back to Maintenance Item for tracking and awareness of backport, with "**Tracks**" link.
   b. **Core dev** creates new Maintenance Item for additional fix or fix to regressions, to make sure they also get backported for maintenance.

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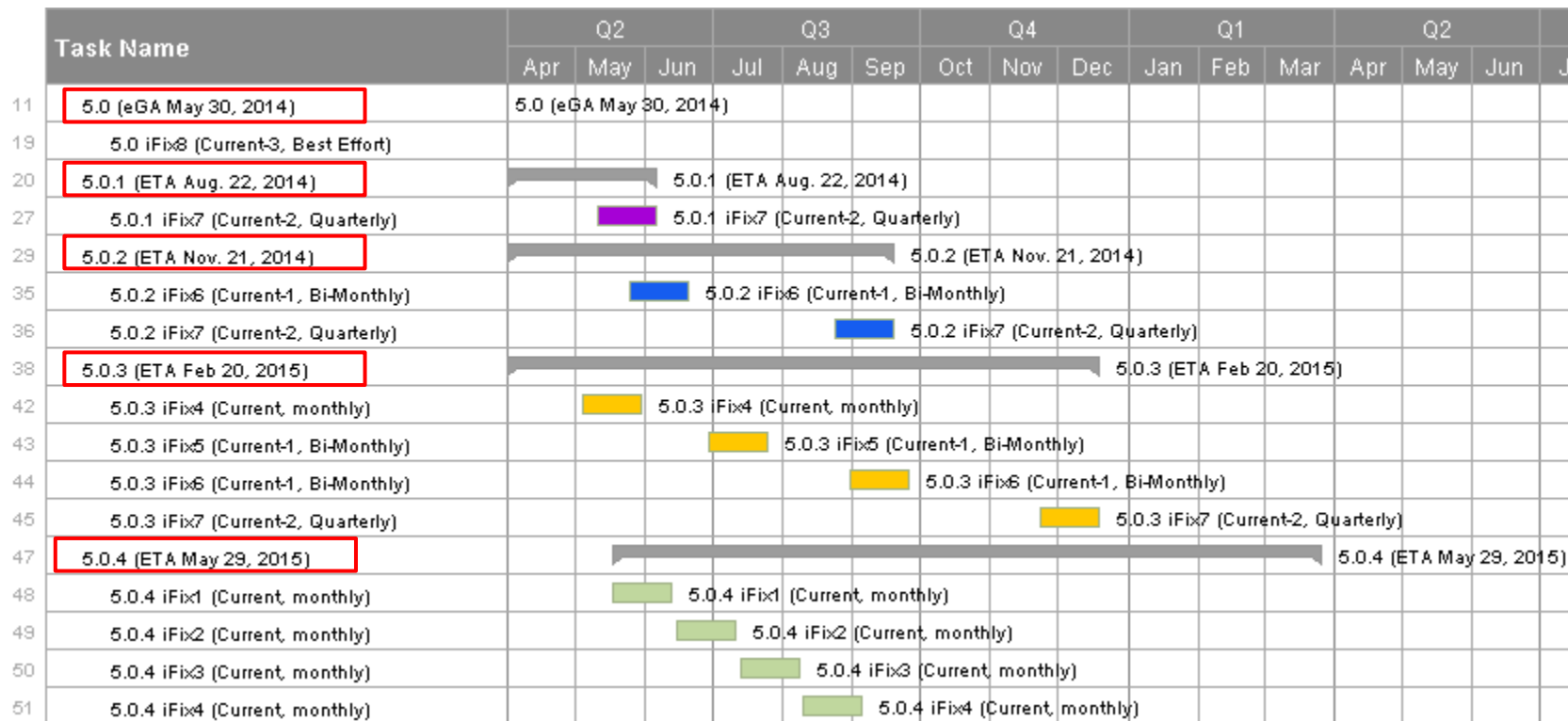
- Maintenance Cadence (Proposal)

Data: 4.0.x APAR Delivery Trend

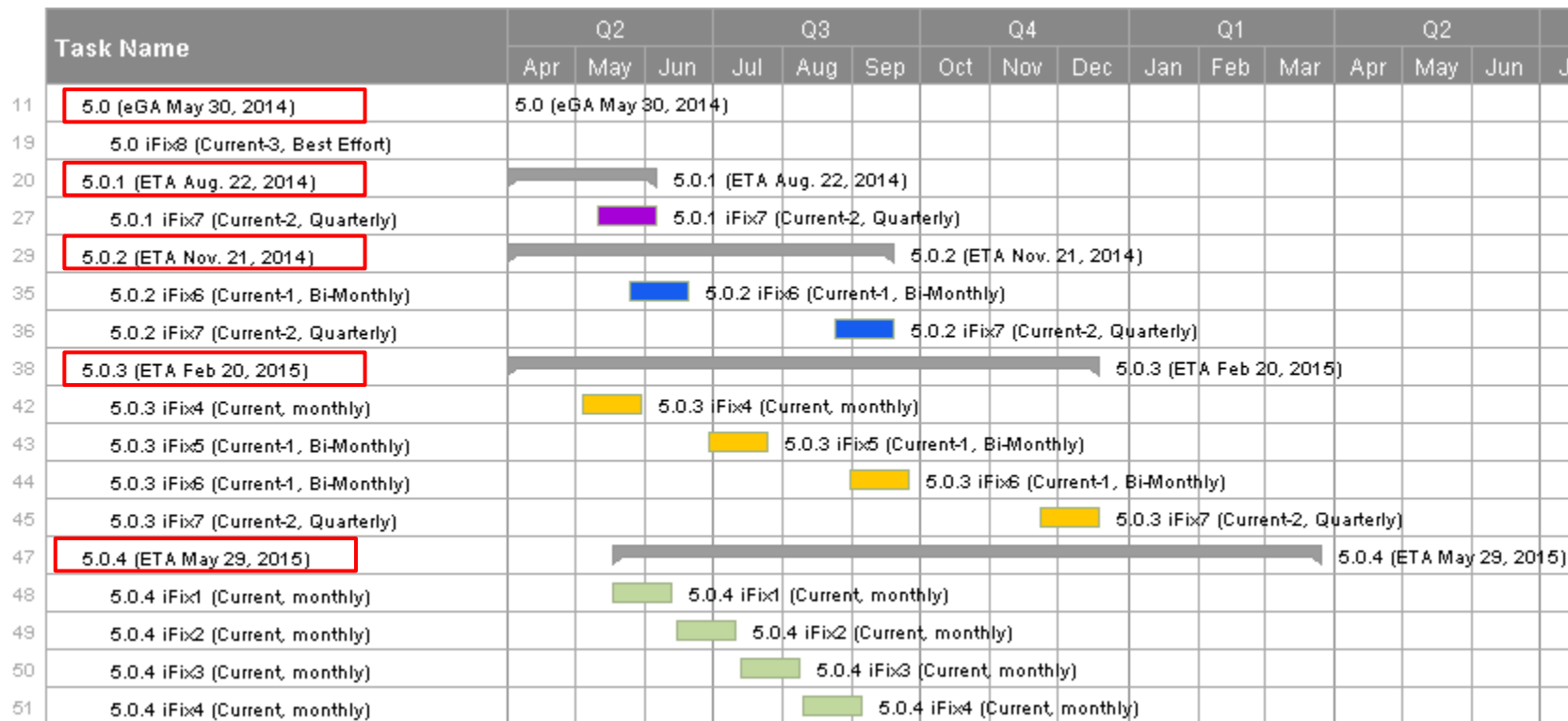|	GA date	Mar Y13	Apr Y13	May Y13	Jun Y13	Jul Y13	Aug Y13	Sep Y13	Oct Y13	Nov Y13	Dec Y13	Jan Y14	Feb Y14	Mar Y14	Apr Y14
4.0.2	03/15/13	4	7	17	6	14	10	6	7	12	4	8	4	1	2
4.0.3	06/07/13				4	18	25	19	20	18	13	16	13	14	12
4.0.4	09/06/13							6	17	20	18	17	8	4	1
4.0.5	12/06/13										3	35	32	31	31
4.0.6	02/28/14												2	21	17

5.0.x iFix Cadence (Proposal)
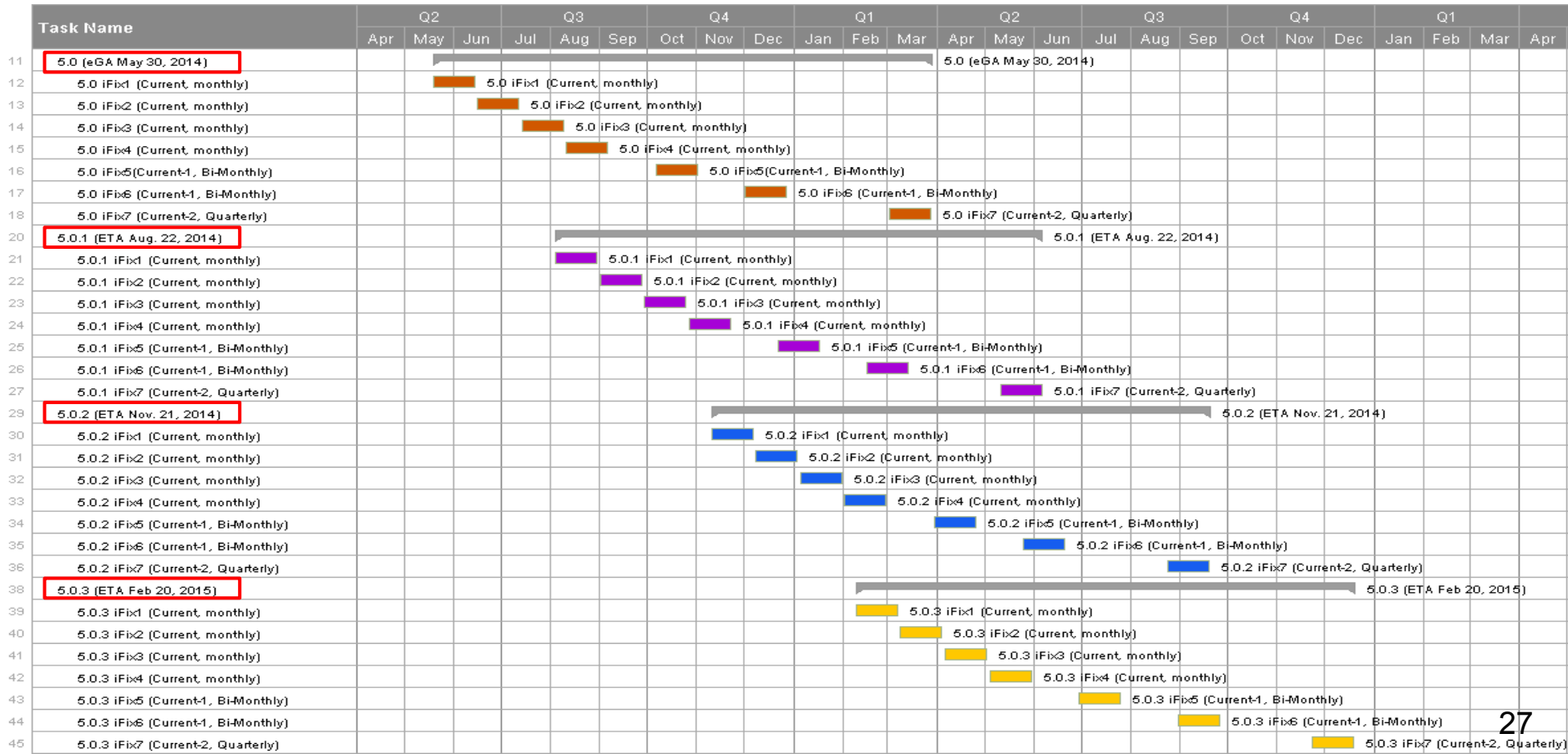
5.0.x iFixes in June 2015 (proposal)

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THANK YOU

Backup Slides

5.0.x iFix Cadence (Proposed)

- Current GA: monthly iFix
- Current - 1:   Bi-monthly iFix
- Current - 2:   Quarterly iFix
- Current - 3:   Best Effort
- ESR: monthly

5.0 iFix Dev Process

2. Patch Info.

- Each product deliver one patch info.
- Readme contains all details
- e.g. "JTS Patch is active. Contact your system admin for details on fixes included in this patch in readme.txt."
- Update iFix number for each iFix