Fox ML Infrastructure — Release Policy

This document defines the versioning strategy, release cadence, and update policies for Fox ML Infrastructure.

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1. Versioning Strategy

1.1 Semantic Versioning

Fox ML Infrastructure uses **semantic versioning** (SemVer): `MAJOR.MINOR.PATCH`

- **MAJOR** (`v1.0.0 -> v2.0.0`) — Breaking changes, incompatible API changes
- **MINOR** (`v1.0.0 -> v1.1.0`) — New features, backward-compatible additions
- **PATCH** (`v1.0.0 -> v1.0.1`) — Bug fixes, security patches, backward-compatible fixes

Examples: - `v1.2.0` — Minor release with new features - `v1.2.1` — Patch release with bug fixes - `v1.2.2` — Patch release with security fixes - `v2.0.0` — Major release with breaking changes

1.2 Version Tags

All releases are tagged in the enterprise base repository: - Tags follow the format: `v1.2.0`, `v1.2.1`, etc. - Tags are immutable — once released, a version tag is never modified - Release notes accompany each tag

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2. Release Cadence

2.1 Patch Releases

Frequency: Weekly (as needed)

Includes: - Bug fixes - Security patches - Documentation updates - Minor configuration improvements

Backward Compatibility: Always backward-compatible within the same minor version

Examples: `v1.2.0 -> v1.2.1`, `v1.2.2`, `v1.2.3`

2.2 Minor Releases

Frequency: Monthly (approximately)

Includes: - New features - Performance improvements - New model types or strategies - Enhanced configuration options - Backward-compatible API additions

Backward Compatibility: Always backward-compatible within the same major version

Examples: `v1.2.0 -> v1.3.0`, `v1.4.0`

2.3 Major Releases

Frequency: As needed (typically 6-12 months)

Includes: - Breaking API changes - Architectural changes - Significant refactoring - Removal of deprecated features

Migration: Migration guides and documentation are provided

Examples: `v1.9.0` -> `v2.0.0`

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3. Deprecated API Handling

3.1 Deprecation Policy

Deprecation Timeline: 1. **Announcement** — Feature is marked as deprecated in release notes 2. **Warning Period** — Deprecated features remain functional for at least one minor version 3. **Removal** — Deprecated features are removed in the next major version

Example: - `v1.2.0` — Feature X is deprecated (announcement) - `v1.3.0` — Feature X still works but shows deprecation warnings - `v2.0.0` — Feature X is removed

3.2 Migration Support

- **Migration guides** — Documentation provided for migrating from deprecated features
- **Backward compatibility** — Deprecated features remain functional during the warning period
- **Support** — Support is provided for migration questions during the deprecation period

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4. Safe Migration Policy

4.1 Upgrade Path

Recommended Upgrade Strategy: 1. **Stay current** — Upgrade to the latest patch version within your minor version 2. **Test minor upgrades** — Test minor version upgrades in a development environment 3. **Plan major upgrades** — Major version upgrades require planning and migration

Example: - Current: `v1.2.5` - Recommended: Upgrade to `v1.2.6` (latest patch) - Next: Test `v1.3.0` in development, then upgrade production - Future: Plan migration to `v2.0.0` when ready

4.2 Version Support

Supported Versions: - **Full support** — Latest minor version and the previous minor version - **Security patches only** — Versions within two minor versions of latest - **No support** — Versions older than two minor versions

Example (if latest is `v1.5.0`): - `v1.5.x` — Full support - `v1.4.x` — Full support - `v1.3.x` — Security patches only - `v1.2.x` and older — No support

Recommendation: Stay within two minor versions of the latest release for full support.

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5. Release Communication

5.1 Release Notes

Each release includes: - Version number and release date - Summary of changes - New features (minor/major releases) - Bug fixes (patch releases) - Security fixes (if applicable) - Deprecation notices (if applicable) - Migration notes (if applicable)

5.2 Enterprise Changelog

Enterprise customers receive: - `CHANGELOG_ENTERPRISE.md` — Detailed changelog for commercial releases - Release notes in private repository - Email notifications for major releases and security patches (Enterprise/Premium support)

5.3 Security Advisories

Security patches are communicated: - **Immediately** — Enterprise and Premium support customers are notified immediately - **Public disclosure** — Security issues are disclosed after patches are available - **Patch releases** — Security fixes are released as patch versions

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6. Client Repository Updates

6.1 Update Process

Client repositories track version tags from the enterprise base:

1. **Tag-based tracking** — Client repos track specific version tags (e.g., `v1.2.0`)
2. **Independent updates** — Each client repo can be updated independently
3. **Version bumping** — Clients upgrade by updating to a new version tag

6.2 Update Recommendations

Recommended Update Schedule: - **Patch releases** — Update within 1-2 weeks (especially security patches) - **Minor releases** — Update within 1-2 months (test in development first) - **Major releases** — Update when ready (plan migration, test thoroughly)

See `LEGAL/ENTERPRISE_DELIVERY.md` for details on repository structure and update workflow.

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7. Breaking Changes

7.1 Major Version Policy

Breaking changes only occur in major versions:

- API changes that require code modifications
- Configuration format changes
- Removal of deprecated features
- Architectural changes that affect integration

7.2 Migration Support

For major version upgrades: - **Migration guides** — Detailed documentation provided - **Support** — Enterprise/Premium support includes migration assistance - **Timeline** — Deprecated features remain functional until the next major version

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8. Release Quality Assurance

8.1 Testing

All releases undergo: - Unit testing - Integration testing - Regression testing - Documentation review

8.2 Release Criteria

Releases are made when: - All tests pass - Documentation is updated - Release notes are prepared - Security review is completed (for security patches)

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9. Emergency Patches

9.1 Critical Security Issues

For critical security issues: - **Immediate patch** — Patch is released as soon as possible - **Notification** — Enterprise/Premium customers are notified immediately - **Documentation** — Security advisory is published

9.2 Critical Bug Fixes

For critical bugs: - **Priority handling** — Enterprise/Premium support customers receive priority - **Patch release** — Patch is released as soon as possible - **Communication** — Affected customers are notified

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10. Summary

Key Release Principles:

1. **Semantic versioning** — Clear version numbering (MAJOR.MINOR.PATCH)
2. **Regular cadence** — Patch releases weekly, minor releases monthly
3. **Backward compatibility** — Breaking changes only in major versions
4. **Deprecation policy** — Clear timeline for deprecated features
5. **Safe migration** — Migration guides and support for upgrades
6. **Version support** — Support for current and previous minor versions
7. **Security priority** — Immediate patches and notifications for security issues

This policy ensures predictable, safe, and well-communicated releases for all Fox ML Infrastructure customers.

Contact

For questions about releases or upgrade planning:

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Related Documents

- `LEGAL/ENTERPRISE_DELIVERY.md` — Repository structure and update workflow
- `CHANGELOG_ENTERPRISE.md` — Detailed changelog for commercial releases
- `LEGAL/SUPPORT_POLICY.md` — Support tiers and response times
- `LEGAL/SERVICE_LEVEL_AGREEMENT.md` — SLA terms for Enterprise support