



Release management

TfL Online's Release management process is used to move releases in a controlled manner between different environments.

Our digital sites and services need a range of different infrastructure environments to keep discrete versions of software. The environments include:

- **Development**
Used by development teams to create the next version of the TfL website
- **Test**
Used to test software before being deployed to production infrastructure
- **Pre-production**
Used to test a complete version of production software before it is transferred to production infrastructure
- **Production**
Infrastructure used to provide the TfL website to its users

Audience

- Suppliers
- Stakeholders
- Developers
- Project and relationship managers
- Testing team

Background

TfL sites and services are kept running by internal and external support teams. These teams use a set of pre-defined processes based on Information Technology Infrastructure Library (ITIL) service management.

ITIL is the most widely adopted guidance for IT service management worldwide. It was created by experts who incorporated the learning experiences and practices of leading organisations, 'best-in-class' practitioners and IT service providers from around the world.

Outline

1. The ITIL definition of release management is:

The process responsible for planning, scheduling and controlling the movement of releases to test and live environments. The primary objective of release management is to ensure that the integrity of the live environment is protected and that the correct components are released

2. The steps involved in release management are:

- **Release planning and preparation**

Release planning considers how a release will occur. It looks at the different options for a release, as well as any constraints which must be taken into account

- **Plan and prepare for deployment**

Each deployment is planned in detail, including developing detailed plans and identifying the resources to undertake deployment

- **Build and test release**

A release will consist of all software changes to be deployed to different environments. A release is tested before it is deployed, including testing whether or not any rollback plans work

- **Transfer, deploy, retire**

The release is executed

- **Verify and review deployment**

Once deployed, a release is verified. Verification relies on feedback from end users or embedded analysis software. Analysis is used to make sure the deployment performs as expected.

- **Acceptance tests**

Acceptance testing is used to make sure a release meets a set of pre-defined criteria prior to release to the next environment. Tests may include meeting functional requirements, such as the ability to provide Journey Planner. They may also cover the ability of staff to keep a site or service operational

- **Operational testing and pilots**

Early versions of software may be demonstrated or piloted to limited numbers of users to verify operation

- **Early life support**

The effort and tasks required to support new software in an operational environment will be different from software that has been in operation for a period of time.

There may be more incidents which potentially impact website users, or more queries as the structure of the software may have changed. Early life support makes sure that any additional resources or processes are in place to undertake these additional tasks

- **Release closure**

Once a release is completed, a formal review of the release process occurs to capture any lessons learned to improve any future release processes

Why we do this

Having a release management process means there should be minimal disruption to end users of our digital sites and services as functionality is enhanced.

End users get consistent performance at the high level of service that TfL is expected to provide.

Further reading

More information on ITIL can be found on the [ITIL website](#).

ITIL consists of five core publications:

- Service strategy
- Service design
- Service transition
- Service operation
- Continual service improvement

These are available through the ITIL website.

Type: Guideline
Owner: TfL Online Compliance
Department: TfL Online

Version history

| Version | Date | Summary of changes |
|----------------|-------------|---------------------------|
| 1.0 | 12/11/2013 | First issue |

Review history

| Name | Title | Date | Comments |
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