

Jade Technologies

JADE 2018 Roadmap

JADE



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JADE



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Philosophy

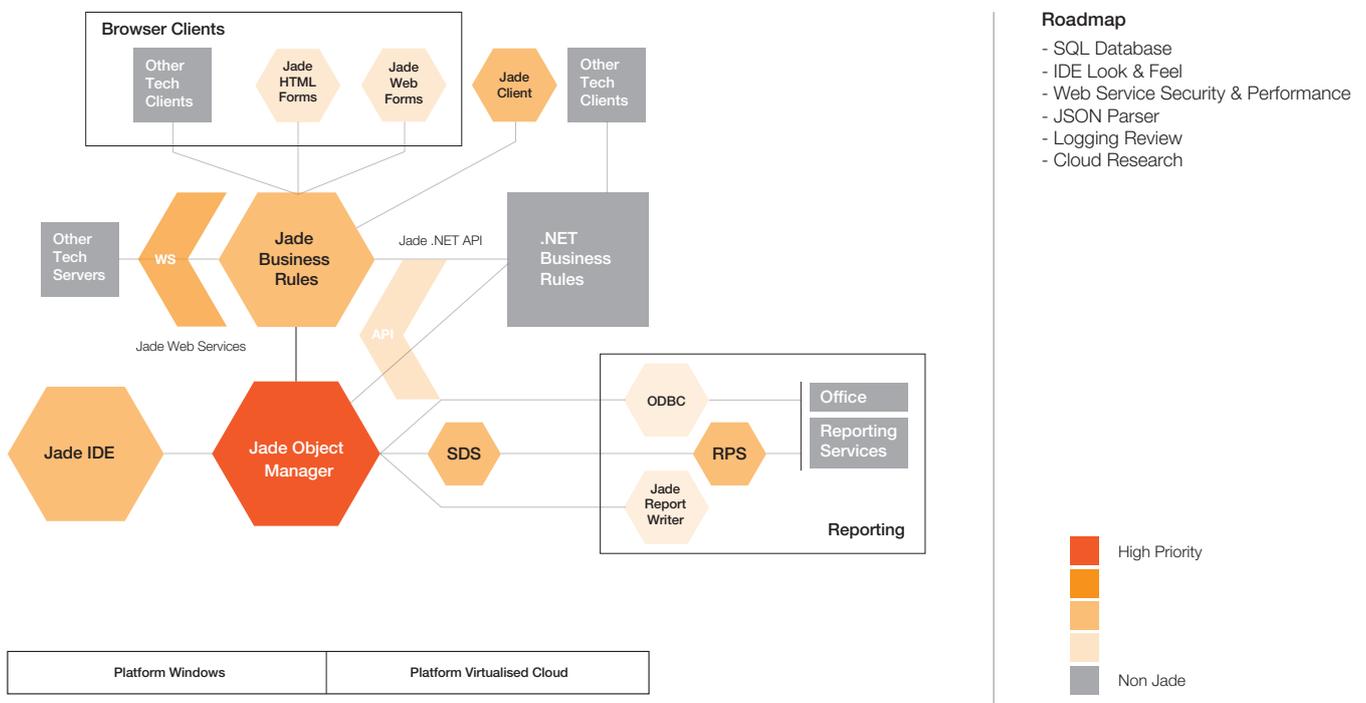
The JADE™ product has been developed and extended since its initial release in 1996. Over that period, features and capabilities have been added to meet requirements that did not even exist at the time of its design.

We believe that the core JADE product is relevant and useful within the information systems environment. We are also committed to maintaining an upgrade path to allow users to move to new versions with minimal cost.

The JADE roadmap philosophy is to concentrate development on the parts of the product that are unique and where users can derive substantial benefit. In today's Internet driven world that means that the emphasis is on:

- Server side features – including cloud deployment
- Developer experience
- Performance
- Interoperability

The following heat-map diagram represents the broad thrust of our investment.





Naming Convention

The JADE product has the following naming convention:

- The JADE version number is the calendar year of release
- Service packs will be released on an as-required basis. They will be created to provide improved reliability or quality, and from time to time to add limited new feature capability where this is highly desirable and safe to do

Customer Alignment

It's important for us to continue to develop the JADE product to meet our evolving customer needs. We have commissioned the JEDI platform to promote collaboration and make it even easier for our customers and partners to have input to product direction.

In the last 18 months we have held 26 NFS review meetings, where we considered 441 separate NFSs. Of these 134 have been approved, and 87 already implemented. A further 170 items are under investigation, assigned to future roadmaps or included in larger review items such as our UX review.

We have no outstanding NFSs left from 2017, and only 30 from 2016.

JEDI has been well supported in the month since it was launched and we have had 56 ideas submitted. Of the 10 most voted for ideas, 1 is being implemented in the 2016 Support Release, and 7 of the remaining top 9 are scheduled for the 2018 release.

Alignment with Industry Trends

The two major industry analysts, Gartner and Forrester have each identified common trends that will drive IT spending in the future. It is important for Jade to be able to address these critical areas in order to provide our customers with the ability to keep pace with changing business requirements.

The JADE roadmap addresses each of these areas and will increasingly allow users to take advantage of the business opportunities these technologies offer.

Mobile

JADE 2016 offers SOAP and REST web services, developer access to JSON and XML libraries, and enhanced security and performance for web services.

In JADE 2018, we will add Web Sockets to the product to enable fast bi-directional communication with clients.

Cloud

JADE 2018 will continue to make JADE even easier to deploy in the cloud.

Big Data/Analytics

We will continue to support and improve RPS as our preferred method of populating a SQL database for subsequent BI activity.

JADE 2016 Service Pack

We plan to release a service pack for JADE 2016 prior to the end of Q1 2018.

This will contain fixes for a number of long-standing and complex RPS issues that are not able to be suitably addressed via the hotfix mechanism.

It will also consolidate fixes and patches that have been applied to the product since initial release.

We will also take this opportunity to add a high-performance String replace function, which was the highest voted JEDI item, and can be done with no risk to existing code or systems.

This Service Pack will be a non-reorg install.

Environment

Supported Operating Systems

JADE 2018 will run on specified Windows operating systems (see below) and provide a 64-bit database server with both 32-bit and 64-bit clients available. Please note that any node that hosts a JADE database must be 64-bit; this includes single user application servers and single user standard clients. The 32-bit clients that are available are multi user clients (application servers, thin clients and standard clients) that connect to the 64-bit database server.

JADE 2018 supports Windows only.

Database Server, available in 64-bit only

- Windows 2012 Server or later
- Windows 8 or later

Application Servers and Standard Clients, available in 32-bit and 64-bit but must be 64-bit if hosting a database

- Windows 2012 Server or later
- Windows 8 or later

Thin Client Workstation, available in 32-bit and 64-bit

- Windows 2012 Server or later
- Windows 8 or later

Listed Microsoft operating systems are fully supported while they are in Microsoft Mainstream Support. As operating systems enter Microsoft Extended Support, they are supported on a best endeavours basis consistent with the support able to be accessed from Microsoft.

Support for Previous Releases

JADE 7.1 will be supported until Q2 2020, and JADE 2016 will be supported until Dec 2021.

Parameterised Constructors

JEDI ranking #7 (and part of #6)

Benefit

Parameterised Constructors allow developers to create and initialise an object with a single call, and it is a clear and dependable way to express the dependencies in a class. Most modern languages provide this capability and it is a highly requested feature for JADE.

Description

We will implement Parameterised Constructors in JADE, that allow multiple constructors to be defined for a class in addition to the current default one. The constructors will allow different parameters to be passed in and the appropriate constructor will be called at runtime.

Source Control

JEDI ranking #1

Benefit

The current JADE source control facilities (Deltas and Patches) will be extended to facilitate integration with third party source control systems such as GIT and TFS. This will make management of large projects with multiple developers working on the same system easier, more auditable, and better controlled. It will also facilitate management of systems that include both JADE and non-JADE components.

Description

We will implement the ability to round-trip JADE specifications through multiple XML files representing the elements in a JADE system. These files will be able to be managed by a third party source control system. We will also provide a level of integration between JADE patches and the Microsoft TFS platform.

Developer Enhancements

JEDI ranking #2,3,4,5,9,10

Benefit

It is important that we continue to keep the JADE development experience in line with industry trends.

Description

We will implement a number of suggestions from the development community to improve the overall experience. This list includes a number of frequently requested New Feature Suggestions.

IDE Look and Feel

Benefit

This enhancement is intended to reduce developer barriers to entry, by making the IDE more approachable, usable, and productive.

Description

Following an initial UX review, the 2018 release will include:

- Alternative navigation
- Layout flexibility
- More drag and drop options
- Better search facilities and information presentation
- Enhanced auto complete
- Improve and unify the implementation of shortcut keys in the Painter

Web Service Security and Performance

Benefit

Security handling for web services will be extended and improved, to provide additional standard functionality in order to reduce the possibility of a malicious hack into services being provided by a JADE web services provider.

Description

JADE will be enhanced to protect against a 'man in the middle' attack on session based web services. It is possible for user code to provide this protection currently, but we believe that it is safer and more responsible for Jade to provide this as part of the product.

As part of this development, a review of web service security in general will be undertaken in conjunction with our security consultants, and any necessary action taken.

Web Sockets

Benefit

Web Sockets is an advanced technology that makes it possible to open an interactive communication session between the user's browser and a server. With this API, you can send messages to a server and receive event-driven responses without having to poll the server for a reply.

Description

Adding Web Sockets to JADE will keep the product up-to-date with the latest technology in developing web based applications, and provide a way to develop fast, responsive web clients for existing JADE applications.

Diagnostics

Benefit

Time spent by developers diagnosing their application problems significantly reduces productivity. We recognise this issue and will continue to improve the tools available to JADE developers.

Description

We will extend the JADE diagnostics to:

- Provide more details in exception reporting
- Extend deadlock exceptions to cover deadlock chains
- Provide thin client exit code

Runtime Configuration

Benefit

JADE systems are deployed in a variety of configurations to suit workload, and machine capacity. We will add further flexibility to the production use of a single user app server, i.e. combined app server/RAP environment. This will deliver substantial performance benefits for those users who do not actually need multiple app servers, but have been running in this mode to be able to load code changes online.

Description

This Single user app server will allow most of the functionality of JadLoad to be run against it through use of embedded apps in the JADE RootSchema. This will enable production implementations of this configuration.

Testing

Benefit

JADE currently provides an inbuilt unit testing framework which enables testing of code. There is no current way to easily test screen and form based interaction. Third party tools are not able to effectively drive JADE systems. The release of a JADE based testing tool will enable developers and testers to automate testing of GUI interfaces.

Description

The Automated Test Code Generator (ATCG) product that has been developed for internal use will be repackaged and released for general consumption. This product enables users to record and replay GUI sessions.

Cloud Interoperability

Benefit

JADE systems are increasingly being deployed into cloud-based environments. This set of features will be investigated to improve the scalability and interoperability of JADE systems running in cloud environments, including Amazon Web Services and Azure.

Description

We will continue to investigate what is required to enable JADE to dynamically scale better within common cloud environments.

This includes assessing the ability of JADE to scale horizontally by dynamically changing the number of application servers available to a system.

We will also investigate options for scaling vertically.

FUTURE RELEASES

Philosophy

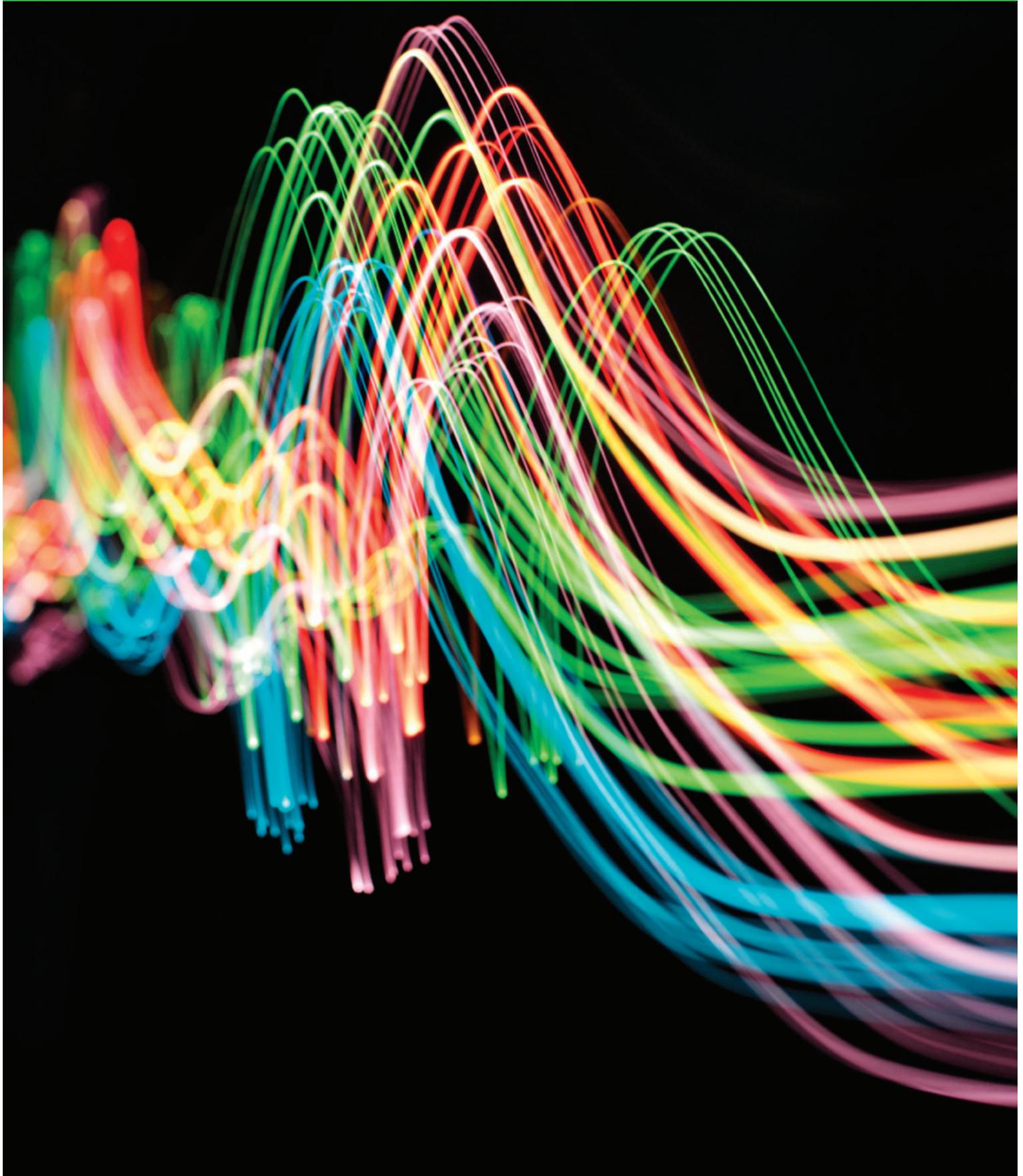
This release will be supported until 2024, and will be an update that works co-operatively with other technologies to maximise the investment that Jade partners and customers have in existing systems. This means focusing on the parts of the product where JADE is strong, and providing low-barrier interfaces to other technologies that fill gaps where JADE is less capable.

This will be an update that works co-operatively with other technologies to maximize the investment that Jade partners and customers have in existing systems.

Reference Document

Previous Release

JADE



Environment

Supported Operating Systems

JADE 2016 will run on specified Windows operating systems (see below) and provide a 64-bit database server with both 32-bit and 64-bit clients available. Please note that any node that hosts a JADE database must be 64-bit; this includes single user application servers and single user standard clients.

The 32-bit clients that are available are multi user clients (application servers, thin clients and standard clients) that connect to the 64-bit database server.

JADE 2016 supports Windows only.

Database Server, available in 64-bit only

- Windows 2008 Server (R2 recommended) with the latest security updates
- Windows 2012 Server
- Windows 7 with the latest security updates
- Windows 8
- Windows Small Business Server 2011 with the latest security updates

Application Servers and Standard Clients, available in 32-bit and 64-bit but must be 64-bit if hosting a database

- Windows 2008 Server (R2 recommended) with the latest security updates
- Windows 2012 Server
- Windows 7 with the latest security updates Windows 2012 Server
- Windows 8
- Windows Small Business Server 2011 with the latest security updates

Thin Client Workstation, available in 32-bit and 64-bit

- Windows 2008 Server (R2 recommended) with the latest security updates
- Windows 2012 Server
- Windows 7 with the latest security updates
- Windows 8
- Windows Small Business Server 2011 with the latest security updates

Listed Microsoft operating systems are fully supported while they are in Microsoft Mainstream Support. As operating systems enter Microsoft Extended Support, they are supported on a best endeavours basis consistent with the support able to be accessed from Microsoft.

Other Changes

JADE 2016 will be built using Microsoft Visual Studio 2013, which will require the installation of appropriate C++ runtime binaries.

Support for Previous Releases

As per our [Release Policy](#) and [Release Schedule](#), JADE 7.0 will be supported until September 2016 and JADE 7.1 will be supported until Q2 2020.

Class Methods

Benefit

Class methods allow a cleaner implementation of programming models. Most modern languages provide this capability and it has been a long requested feature for JADE.

Description

We will implement Class methods which allow developers to define and call methods on Classes, without having to instantiate a dummy object. This will simplify aspects of development in JADE.

Developer Enhancements

Benefit

Developers working on JADE systems are exposed to alternate development environment. It is important that we continue to keep the JADE development experience in line with industry trends.

Description

We will implement a number of suggestions from the development community to improve the overall experience. This list includes a number of frequently requested New Feature Suggestions.

IDE Look and Feel

Benefit

This enhancement is intended to reduce developer barriers to entry, by making the IDE more approachable, usable, and productive.

Description

We will rework the branding, iconography, and UI for the IDE. This will be a mid-life refresh, rather than a complete rework, but the intention is to move to a more modern and flatter look that will better reflect the product brand values.

Web Service Security and Performance

Benefit

Security handling for web services will be extended and improved, to provide additional standard functionality in order to reduce the possibility of a malicious hack into services being provided by a JADE web services provider.

Description

JADE will be enhanced to protect against a 'man in the middle' attack on session based web services. It is possible for user code to provide this protection currently, but we believe that it is safer and more responsible for Jade to provide this as part of the product.

As part of this development, a review of web service security in general will be undertaken in conjunction with our security consultants, and any necessary action taken.

JSON Parser

Benefit

JSON is the lingua franca of Web 2.0 and is increasingly used for communications between computer applications. We will provide an accessible version of the Parser in the same way that we currently do for XML.

Description

JADE added JSON handling as part of the product in release 7.1, in order to support REST based web services. This feature will open the parser to developer access.

Cloud Interoperability

Benefit

JADE systems are increasingly being deployed into cloud-based environments. This set of features will be investigated to improve the scalability and interoperability of JADE systems running in cloud environments, including Amazon Web Services and Azure.

Description

We will investigate what will be required to enable JADE to scale better within common cloud environments.

This will include assessing the ability of JADE to scale horizontally by dynamically changing the number of application servers available to a system.