Node.js is turning into one of the most popular application platforms for web development and microservices. A recent paper from Forrester Research, described it as a Swiss Army Knife rather than just another application platform. Here at TIBCO, we agree and have added full support of Node.js applications to our iPaaS product, TIBCO Cloud™ Integration.

- The TIBCO Cloud Integration API modeler eases the process of defining and sharing API specs.
- Node.js skeletons can be automatically generated from the API specification to kickstart the development cycle.
- The completed Node.js apps can then be hosted in the same iPaaS alongside TIBCO BusinessWorks™ integration apps, TIBCO Cloud Integration — Web Integrator apps, or the new TIBCO Cloud™ Live Apps application, which allows business/citizen developers to create fully functional, smart applications in minutes and solve complex problems with ease.

**WHAT'S SO GREAT ABOUT NODE.JS?**

When Silicon Valley startups favor a given technology, it’s fair to assume it just might be another “latest new tech toy.” But when slower moving traditional companies start adopting a technology, it’s time to look and see what all the fuss is about.
Node.js has very quickly become the go-to toolkit for developers all over the world. The vast array of packages available for Node.js developers through npm (https://www.npmjs.com/) has greatly accelerated its adoption, once again proving that technology adoption relies heavily on the availability of content. In this case, it’s reusable packages that help developers with well-written software with functionally rich features speed development based on industry best practice.

At TIBCO, we know that getting a project started is the hardest phase. The TIBCO Cloud Integration API Modeler helps developers and designers create Open API (Swagger) specifications within your favorite browser using a graphical interface to define your API.

Creating API specs in TIBCO Cloud Integration.

Further, from the completed specifications you can speed the initial validation of your new APIs by creating simple mock applications with a single click. This capability gives your API user community the ability to view and interact with the API before you’ve written a line of code.

Once the API has been tested and approved through interaction with the live mock application, the next phase can begin. You can speed the initial development process by getting TIBCO Cloud Integration to generate a Node.js skeleton direct from the API specification. This code can then be augmented with the required business logic for your API implementation.

The generated code is based around the Express framework (http://expressis.com/) that gives developers a solid base for building out the actual implementation of the API’s business logic.

For a step by step guide to creating your first Node.js app with TIBCO Cloud Integration, visit the Community Wiki (https://community.tibco.com/wiki/getting-started-nodejs-tibco-cloud-integration)
Creating a Node.js application in Microsoft Visual Studio using the API spec created in TIBCO Cloud Integration.

**BUILDING BUSINESS LOGIC WITH TWO TYPES OF APPS**

In addition, TIBCO Cloud Integration provides you with two other types of apps to build your business logic:

The first, built on the TIBCO BusinessWorks platform, enables developers to create highly complex data and process integrations in a zero code environment, all deployed to TIBCO Cloud Integration.

The second is a new integration tool called Web Integrator based on TIBCO’s open source Project Flogo (http://flogo.io). With Web Integrator, you can build simple flows that are initiated by a trigger event and can interact with other applications through connectors and Web Integrator activities.
If you don’t have the activity you need, existing Flogo activities can be added to the environment and used as they are in Web Integrator flows. If you can’t find a Flogo activity that does what you need, you can build your own custom activities in Golang.

Build your own extensions using Project Flogo for use in TIBCO Cloud Integration.

**PLUGIN HELPS WITH DEVELOPMENT**
Lastly, developers should be aware that TIBCO also offers a plugin for Microsoft Visual Studio Code that aids development tasks (https://github.com/TIBCOSoftware/vscode-extension-tci). It provides a number of features that allow developers to quickly and easily build Node.js apps. It has features to deploy a Node.js app to the Cloud, run and test your Node.js locally, interact with TIBCO Cloud Integration features, and even generate, non Express Node.js apps for code driven development.

The TIBCO Cloud Integration plug-in within Microsoft Visual Studio.
CONCLUSION

Now that Node.js has come of age, you can further enhance its usability with TIBCO’s iPaaS, TIBCO Cloud Integration. Speed your development with cloud-based API design and kickstart your application development using generated Node.js skeletons. Once you have built your application, you can host the app on the TIBCO Cloud Integration platform. And you gain further competitive advantage by leveraging TIBCO’s extended integration toolset (TIBCO BusinessWorks and/or Live Apps) in the same cloud environment.

For more information on TIBCO Cloud Integration, and to sign up for a free 30 day trial, visit http://cloud.tibco.com.