

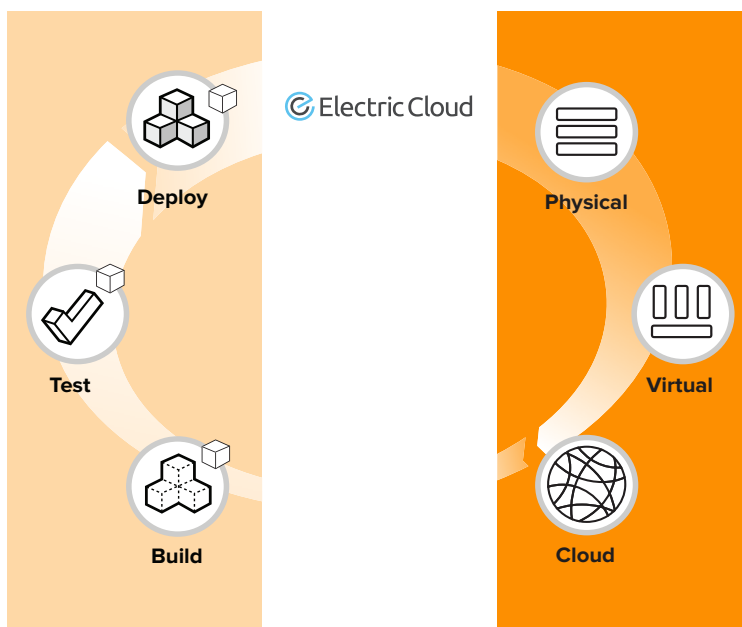
## ElectricFlow

Accelerate and Standardize  
Your Software Delivery with an  
End-to-End Automation solution

*ElectricFlow accelerates software delivery to improve code quality and visibility by automating software releases and maintaining Continuous Delivery throughout the build test and deploy process.*



ElectricFlow® (EF) is a suite of Continuous Delivery-focused products that power your modern software deployment pipeline. EF gives you a set of persona-based Applications that can be adopted together or individually to automate and accelerate your software production bottlenecks, including end-to-end build, test and deploy processes.



*ElectricFlow automates and accelerates the application development lifecycle and its supporting resources.*

### Key Benefits

#### Process Automation

and acceleration with any development methodology.

#### Optimize Resource Utilization

regardless of the type of resource (physical, virtual or private/public cloud).

#### Visibility and Reporting

for better project predictability and fewer process errors.

#### Shared Platform

for disseminating artifacts and best practices across the enterprise.

#### Security and Scalability

to support geographically distributed teams.

## Quickly Author, Run, and Analyze Application Delivery Process Workflows

ElectricFlow provides a flexible workflow solution to automate repetitive tasks throughout the application delivery lifecycle by orchestrating complex multi-server workflows across thousands of concurrent connections using common protocols such as CLI, SSH, REST, HTTP, or proprietary API's. ElectricFlow allows push-button deployments into increasingly production-like environments.

ElectricFlow workflows are **process agnostic**—the workflow supports any development process be it Agile methodology, classic waterfall, or anything in between. **Tool agnostic**—providing an intuitive, flexible, plug in architecture with over 100 out-of-the-box integrations to many key development tools and cloud systems to enable enterprises to quickly model and adapt their existing processes (scripts, tools, manual steps) to the ElectricFlow solution. **Task agnostic**—ElectricFlow workflows can include automated tasks or manual tasks—including human decisions such as active approvals, email notifications, etc., that are common to most delivery processes.

The tasks within workflows and procedures are easily parallelized to accelerate processes and optimize the application delivery. Once the workflow is modeled, ElectricFlow enables simple, push-button procedures to mirror your exact processes. From executing each build-test-deploy task to coordinating hand-offs across development teams, it manages each step of the application lifecycle.

ElectricFlow workflows also provide capabilities to graphically analyze the execution of workflow. From within the workflow interface, users can visualize the results (errors, warnings, logs) of any step, view the execution paths and share this visibility across all organizations to troubleshoot issues quickly.

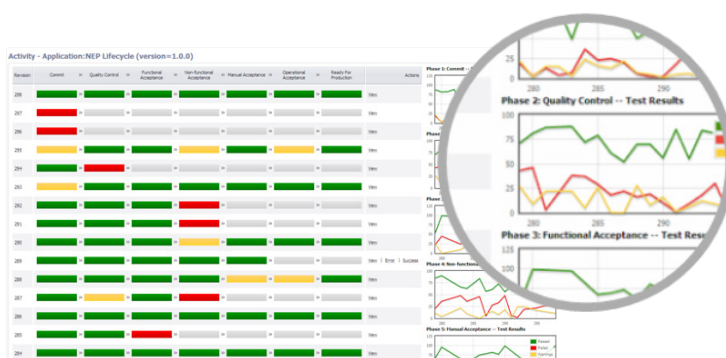
## Maximize Resource Utilization

ElectricFlow manages the resources that support the development and delivery processes. Because ElectricFlow manages the entire software delivery lifecycle, all necessary resources are instantly created as needed (for example—at the start of a test run) and released upon process completion. ElectricFlow can also configure the resources to exact needs of the delivery process. For example, not only can ElectricFlow instantiate a virtual machine (VM), but it can also deploy and configure the right software for the needs of the task. Thanks to the elasticity of cloud, individual workflow steps can be distributed across multiple resources and processed in parallel, dramatically accelerating execution times. This delivers better resource utilization and eliminates virtual machine sprawl. ElectricFlow offers out-of-the-box integrations to many leading physical, virtual and cloud platforms.

## A Unified View Across DEV, OPS, and The Business to Gain Predictability and Insight into Interconnected Processes

As the single System of Record for all workflows (across build, test, and deployment), EC provides a dashboard with intuitive workflow visualization, as well as real-time and historical trend reporting and enables teams (engineering, QA, and operations) to have faster feedback and an accurate understanding of current progress or historical workflow status. Aggregate data is collected from all your tools and processes (number of builds completed, tests ran, estimated failures, and more), to spot trends, including success rates and development cycle times across projects. Track and address exceptions to maintain compliance for critical software development processes.

ElectricFlow analytics database stores all build, test, and deployment information for real-time and trend reporting, giving your organization the power to collect pinpoint statistics (such as the number of builds completed tests



*A fully automated end-to-end development workflow provides visibility into all of its processes, activities, and tasks.*

run, estimated failures), and gain visibility into trends including process success rates across projects.

### The flow of value in a continuous delivery system is embodied by a continuous delivery pipeline.

Rarely is there one single “deployment pipeline.” Instead, each project team usually requires a slightly different pipeline workflow, relying on a blend of tools, technology, approvals and process workflow. ElectricFlow gives DevOps teams the ability to quickly model, action and monitor hundreds of delivery pipelines with a shared, visual model of the end-to-end build-test-deploy process. This centralized visibility and control allows teams to more efficiently manage and track application release.

Designed to consistently store and fill project dependencies, the artifact management repository is controllable, searchable, and auditable. Artifact management system allows metadata tagging of each artifact and version so the correct artifact can be referenced, found, and used during automated processes.

### Enterprise-class Scale, Security, and Best Practices Sharing

ElectricFlow supports multiple teams, working in many locations, programming for multiple platforms or targets. All centrally controlled and managed in an environment designed to scale to support all of the software development projects within a global enterprise. Granular access controls and other security measures allow all teams to leverage a single system while keeping selected assets or projects secure. ElectricFlow is designed to support reusable procedures, making best practices readily available to individual teams, eliminating duplicate work, and giving organizations the power to deploy cross-company standards.

### Out-of-the-Box Agile Solutions for the Enterprise

Enabling organizations to easily adopt Agile methodologies like Continuous Integration (CI), ElectricFlow offers an enterprise-scale CI solution, with a configurable dashboard to easily set-up and manage CI jobs. However, ElectricFlow enables more than continuous integration, testing, and deployment. It also offers simple, push-button “preflight builds and tests.” Just as a pilot goes through a rigorous preflight checklist to ensure the plane is in top condition prior to takeoff, automated preflight builds and tests put the power to compile and test each change before check-in and across all target environments in the developer’s hands. This provides feedback instant feedback to the developers, and reduces the impact an error will have on

the rest of the team. Preflight builds enable effective continuous integration even in the most complex environments.

### Value for Development and IT

ElectricFlow is a comprehensive solution, bridging the gap between IT environments and the tools and processes software development teams need to efficiently deliver successful software. ElectricFlow offers maximum productivity for development organizations by concurrently executing all the machine-oriented tasks while leaving the creative tasks like design and programming to the developers. ElectricFlow helps IT organizations maximize cloud utility by distributing all repetitive tasks in the application lifecycle across centralized infrastructure without risk of machine starvation or data collision to the development teams.

### About Electric Cloud

Electric Cloud delivers solutions that automate and accelerate the application development and delivery process. The company’s award-winning products help development organizations to speed time to market, boost developer productivity, and improve software while leveraging the operational efficiencies provided by virtualized/cloud infrastructures. Leading companies across a variety of industries, including financial services, ISVs, mobile devices, semiconductors and transactional websites rely on Electric Cloud’s automation solutions.

### Key Integrations

ElectricFlow offers over 150 integrations with essential software development tools. For an up to date list, visit [electric-cloud.com/plugins/directory](http://electric-cloud.com/plugins/directory).

- **Software Configuration Management** systems such as ClearCase, Git, Perforce, Subversion, and Microsoft Visual Studio/TFS
- **Build tools** such as Ant, Maven, MSBuild, and eMake
- **Testing and Code Analysis** tools such as Coverity, JUnit, Klocwork, Selenium, and HP QuickTest Professional
- **ALM Solutions** such as HP ALM/Quality Center, IBM Rational Team Concert, Rally, and VersionOne
- **Application Servers** such as Tomcat, WebLogic, WebSphere, and IIS
- **Virtualization Cloud Management Systems** such as Microsoft Systems Center Virtual Machine Manager, VMware vSphere, VMware vCloud Director/LabManager, Amazon EC2, Nimbula and Eucalyptus
- **Integrated Development Environments** such as Eclipse and Microsoft Visual Studio

Key Features	Benefits
<b>Automate Any Build-Test-Deploy Process</b>	
Platform and language independent	No need to learn a new tool or language just to achieve process automation
Personalization	Organize your dashboard to focus on the projects or procedures you use most frequently
Artifact management	Provides a secure, auditable, structured storage & retrieval system for all software development life cycle project output, for consumption by other parts of that development lifecycle or other projects
<b>Key Integrations</b>	
Integrations with Eclipse and Visual Studio® IDEs	Developers can execute any procedure, incl. preflight builds & tests & receive results without leaving their IDE
ALM tool integrations	Connectors to leading SCM, code coverage, & automated test tools allow ElectricFlow to fit seamlessly into any existing environment
<b>Enterprise-class Deployment Scale, Security, and Best Practices Sharing</b>	
Scalable, multi-threaded architecture	Provides dramatically improved throughput & scales to meet the needs of distributed teams
Project mechanism	Organize information by product or into “library” projects that can easily be shared among teams
Multiple workspaces	Distributed teams can store data locally rather than continually polling a remote server
Nested procedures	Create general-purpose building blocks to be reused for multiple purposes
Access controls	LDAP & AD authentication & fine-grained access control lists support secure collaboration & reuse
Enterprise-grade security measures	Secure handling of passwords & credentials supports cross-enterprise usage
<b>Complete Visibility Into Process Metrics and Resource Utilization</b>	
Pinpoint reporting	Statistics like number of compilations, tests run, or test failures enable rapid problem-solving
Enhanced workflow visualization	Graphically display the structure & status of a workflow definition or in-process or historical workflow
Continuous Integration (CI) dashboard	A user-configurable dashboard is simple to set-up and manage CI jobs in ElectricFlow
Cross-project, cross-team reporting	At-a-glance visibility into results across teams or projects provides greater project predictability
Single-click access to job logs	Jump directly to where a problem is detailed for rapid troubleshooting
<b>Accelerate Automated Process and Manage Cloud Resources Efficiently</b>	
Parallel execution	2-3x faster throughput helps you move from nightly builds & tests to multiple procedures per day
Preflight builds and tests	Developers compile & test each change across all targets before checking in source & impacting the rest of the team
Optimizes virtual lab environments	Integrated with virtual management systems to enable dynamic provisioning of resources
Resource management and pooling	Dynamic resource management for physical, virtual, & cloud based resources reduces Development’s dependence on IT

### Supported Platforms for Servers

- Microsoft Windows 8.1, 7, XP
- Microsoft Windows Server 2012, 2008, 2003
- Red Hat Enterprise Linux
- Ubuntu Linux

### Supported Platforms for Agents

- All supported server platforms
- SUSE Linux
- Solaris
- HP-UX
- Any platform running SSHv2 or an equivalent protocol

### Corporate Headquarters

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