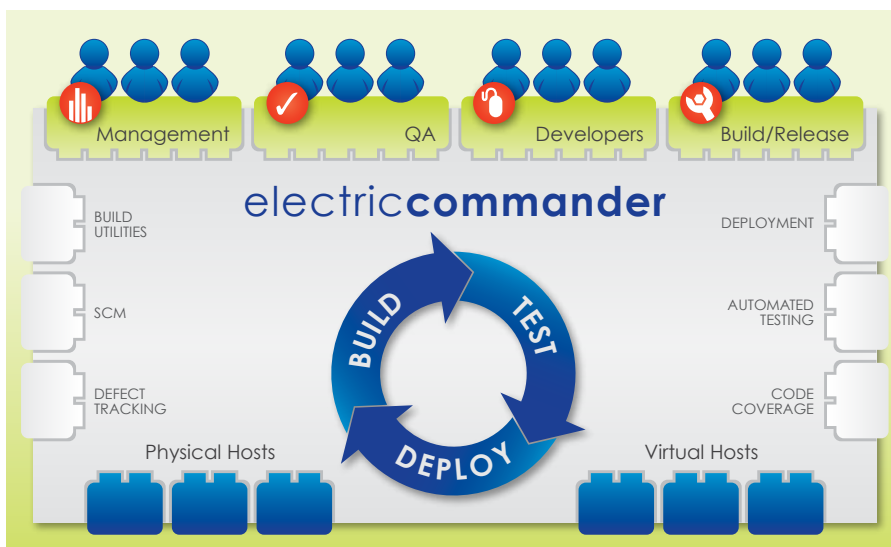


ElectricCommander

ENTERPRISE SOFTWARE BUILD-TEST-DEPLOY AUTOMATION

ElectricCommander® automates and accelerates the software build-test-deploy process that follows the creation of new code. It removes a significant bottleneck for software development by transforming an error-prone, manual process into an agile, reliable command and control system for software production.

Enterprises for which software is mission-critical—such as Qualcomm, Intuit, BioWare (a division of Electronic Arts), and Caterpillar—use ElectricCommander to create a competitive advantage through higher software quality, reduced costs, and increased developer productivity.



With this solution, developers, release engineers, build managers, QA teams, and IT managers gain:

- Faster cycle time and more efficient hardware utilization
- Shared platform for disseminating best practices and reusing common procedures
- Improved ability to support geographically distributed teams
- Reliable Continuous Integration through preflight builds and tests
- Visibility and reporting for better project predictability

HOW IS IT DIFFERENT?

Unlike pure Continuous Integration (CI) servers, ElectricCommander® has an extensible architecture that scales to support multiple teams, working in multiple locations, and developing for multiple platforms—with a single system. And unlike most homegrown systems, ElectricCommander provides a secure, reliable solution that adapts to the way your teams work while requiring minimal administrative overhead to maintain and extend. So your developers and build teams spend less time managing tools, scripts, and servers and more time delivering great software.

WORKS THE WAY YOU WORK

ElectricCommander works with any language and any build utility (Java, C, Make variants, Ant, Maven, etc.) so you can leverage a single system for all programming projects. Plugins for SCM systems, defect tracking tools, IDEs, and other ALM tools and processes make it simple to adopt and roll out across teams. Users can create and share custom plugins for smoother integration with homegrown tools and custom workflows, while the fully-customizable web interface lets users create custom dashboards, dynamic forms, etc. ElectricCommander helps teams achieve a scalable, optimal software production environment, across the organization, without throwing out your existing scripts and processes.

PROVIDES A COMMAND-AND-CONTROL CENTER FOR BUILD-TEST-DEPLOY

ElectricCommander supports multiple teams, working in multiple locations, programming for multiple platforms or targets in an environment that can be centrally controlled and managed. Fine-grained access controls and other security measures allow all teams to leverage a single system while keeping selected assets or projects secure. ElectricCommander is designed to support reusable procedures, making individual teams more

efficient by eliminating duplicate work, and gives organizations the power to deploy cross-company standards.

MAKES PROCESSES TRANSPARENT, AUDITABLE AND REPEATABLE

ElectricCommander's powerful analytics engine provides visibility into one of the best indicators of project success: compiled, tested, working code. ElectricCommander's analytics database stores all build and test information for real-time and trend reporting, giving your organization the power to collect pinpoint statistics (such as number of builds completed, number of tests run, and number of test failures), and gain visibility into trends such as build success rates across projects.

ENABLES RELIABLE CONTINUOUS INTEGRATION FOR ENTERPRISE DEVELOPMENT

ElectricCommander provides out-of-the-box integrations with leading SCM systems for Continuous Integration. To make CI more effective and reliable in an enterprise environment, ElectricCommander enables simple, push-button "preflight builds and tests." Just as a pilot goes through a rigorous preflight check routine 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 with the developers themselves. This provides feedback at the earliest possible moment and reduces the impact that an error will have on the rest of the team. Preflight builds enable effective Continuous Integration even in the most complex environments.

"Since using Electric Cloud's solution, every month has yielded a record low number of breaks. Because there are so few broken builds, the developers are able to really focus on what happened in a particular instance and fix it so that the next time the build goes even more smoothly."

—Sam Johnson, Lead Technical QA, BioWare (a studio of Electronic Arts)

ABOUT ELECTRIC CLOUD

Electric Cloud® is the leading provider of Software Production Management (SPM) solutions. Electric Cloud solutions automate, accelerate, and analyze software build-test-deploy processes to optimize both physical and virtual IT environments. The company's patented and award-winning products help development organizations to speed time to market, boost developer productivity, and improve software quality. Leading companies across a variety of industries, including semiconductors, enterprise IT, ISVs, mobile devices, and transactional Web sites rely on Electric Cloud's Software Production Management solutions to transform software production from a liability to a competitive advantage. For customer inquiries please contact Electric Cloud at (408) 419-4300 or www.electric-cloud.com.

The screenshot displays the Electric Cloud web interface. The top navigation bar includes 'Home', 'Projects', 'Jobs', 'Resources', 'Reports', 'Search', and 'Administration'. The user is logged in as 'manager'. The main content area is divided into several sections: 'Job Configurations' (currently empty), 'Shortcuts' (listing actions like 'Validate Build', 'Deploy Build', 'Undeploy Build', 'Invalidate Build', and 'Run Talkhouse Preflight Build'), 'Jobs Quick View' (showing a list of jobs with status indicators like 'Error', 'Success', and 'Success'), and 'Build and Test-550' (showing a successful build with start and elapsed times). The bottom section shows 'Workflow - BUILT' and 'Workflow - DEPLOY'.

A configurable home page allows users one-click access to the jobs, procedures or assets most important to them.

AJAX-based Web interface helps distributed teams collaborate; all functionality also accessible via command line.

The screenshot displays the 'Job Details' page for a job named 'upgrade.342-to-main-full,19750'. The job is marked as 'Completed with Success'. The page includes a 'General Information' section (Project: Upgrade-EndToEnd, Procedure: Master, Launched by: tanay), a 'Reports' section (screenshot.html), and a 'Links' section (Workspace). The 'Steps' section shows a detailed list of job steps with their status, elapsed time, and resource. The steps are categorized into 'Standard snapshot', 'Preflight snapshot', 'Setup', and '3.0.0'.

Step Name	Log	Status	Elapsed Time	Resource	Actions
Standard snapshot		Success	00:00:01.781	eng	Edit
Preflight snapshot		Skipped	00:00:00.000		Edit
Setup		Success	00:00:05.719	eng	Edit
3.0.0		Success	00:17:18.120		Edit
Linux, local		Success	00:11:37.857		Edit
Setup		Success	00:00:10.641	eng	Edit
Provision configuration		Success	00:01:13.483	labmanager-mulex	Edit
Get host name		Success	00:01:01.546	eng	Edit
Copy files		Success	00:00:28.734	eng	Edit
Remote db - reserve		Skipped	00:00:00.000		Edit
Remote db - setup		Skipped	00:00:00.000		Edit
Install original version		Success	00:02:26.375	eng	Edit
Remote db - set db config		Skipped	00:00:00.000		Edit
Import data		Success	00:00:27.500	eng	Edit
Download install results		Success	00:00:02.719	eng	Edit
Upgrade to new version		Success	00:03:41.625	eng	Edit

KEY FEATURES	BENEFITS
WORKS THE WAY YOU DO	
Platform- and language-independent	<ul style="list-style-type: none"> No need to learn a new tool or language just to achieve process automation
ALM tool and process plugins	<ul style="list-style-type: none"> Plugins for leading SCM, code coverage, defect tracking and other ALM tools, plus a host of reporting and process plugins allow ElectricCommander to fit seamlessly into your existing environment
Integrations with Eclipse and Visual Studio® IDEs	<ul style="list-style-type: none"> Developers can execute any procedure, including preflight builds and tests, and receive results without leaving the IDE
Procedure wizard	<ul style="list-style-type: none"> Intuitive, step-by-step wizard guides new users through setup and execution of common build-test-deploy tasks
CENTRALIZE AND CONTROL BUILD-TEST-DEPLOY SYSTEMS	
Highly scalable, multi-threaded server architecture	<ul style="list-style-type: none"> Provides dramatically improved throughput and scales to meet the needs of distributed teams
Project mechanism	<ul style="list-style-type: none"> Organize information by product or into "library" projects that can easily be shared among teams
Multiple workspaces	<ul style="list-style-type: none"> Distributed teams can store data locally rather than continually polling a remote server
Nested procedures	<ul style="list-style-type: none"> Create general-purpose building blocks to be reused for multiple purposes
Access controls	<ul style="list-style-type: none"> LDAP and AD authentication and fine-grained access control lists support controlled collaboration and reuse
Enterprise-grade security measures	<ul style="list-style-type: none"> Secure handling of passwords and credentials supports cross-enterprise usage
Resource management and pooling	<ul style="list-style-type: none"> Dynamic resource management for both physical and virtual resources reduces Development's dependence on IT
MAKES PROCESSES TRANSPARENT, AUDITABLE, AND REPEATABLE	
Pinpoint reporting	<ul style="list-style-type: none"> Statistics such as number of compilations, number of tests run, or number of test failures enable rapid problem-solving
Cross-project, cross-team reporting	<ul style="list-style-type: none"> At-a-glance visibility into results across teams or projects provides greater project predictability
Single-click access to job logs	<ul style="list-style-type: none"> Jump directly to where a problem is detailed for rapid troubleshooting
ENABLES RELIABLE CONTINUOUS INTEGRATION FOR ENTERPRISE DEVELOPMENT	
Parallel execution	<ul style="list-style-type: none"> 2-3x faster throughput helps you move from nightly builds and tests to multiple procedures per day
Preflight builds and tests	<ul style="list-style-type: none"> Developers compile and test each change across all targets before checking in source and impacting the rest of the team
Optimizes virtual and cloud-based lab environments	<ul style="list-style-type: none"> Integrated with VMware® Lab Manager and Amazon EC2 to enable dynamic provisioning of virtual, physical or cloud resources
Out-of-the-box SCM integrations	<ul style="list-style-type: none"> Simplifies CI with plugins for AccuRev, Git, IBM Rational Clear Case®, Perforce, Subversion, and more

"Business demands require that we have an environment that will scale to manage any size project while balancing jobs properly over heterogeneous resources. ElectricCommander went above and beyond this task and not only made our procedures more flexible and reusable, but has also allowed us to upload build and test statistics. ElectricCommander is a simple yet brilliant system."

— **Laurent Brack,**
Senior Software Manager,
LSI Logic

SUPPORTED PLATFORMS

- Management Server: Windows XP and Vista, Windows Server 2003 and 2008, Red Hat Enterprise Linux
- Agent: Windows, Red Hat Enterprise Linux, Ubuntu Linux, Solaris, HP-UX, Mac OS X, or any platform running SSHv2 or an equivalent protocol
- Browsers: Internet Explorer 6 SP2, Firefox 2.0

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