



DevOps – Data Sheet

DevOps

How we can help

Our team of highly skilled, market-proven consulting specialists will also help you reconstruct your entire IT culture and sustain continuous, accelerated flows with the right architecture of processes and tools.

Instead of having to take advantage of just lean and agile principles, adopt DevOps to allow you and your business to bring true synchronization between the various teams involved in software development and have quality releases as often as needed to fulfill business needs.



Understanding DevOps

To accelerate the rate of business process innovation, DevOps is becoming more and more popular. It takes lean and agile principles a step further and is based on collaboration between business owners, development, and operations teams to create a continuous flow of software delivery. This allows businesses an added facet of versatility, allowing them to seize market opportunities quicker through an accelerated product release schedule.

The goal of DevOps is to streamline the flow along the whole lifecycle, from design, build and test, down to release, deployment, and operation in order to achieve continuous integration/continuous development (CI/CD). DevOps thinking dictates that each part of your technology organization needs to work together as a unified system to provide specific capabilities to your business.

	Level 1 Regressive (Unrepeatable, reactive)	Level 2 Repeatable (Documented, partially automated)	Level 3 Consistent (Processes automated)	Level 4 Managed (Measured, automation stable)	Level 5 Self-Optimizing (Process Improvement Focus)
Build Management & Continuous Integration	<ul style="list-style-type: none"> Manual Processes for Software builds No artifacts and reports management 	<ul style="list-style-type: none"> Regular automated builds and testing Build recreation from source control using automated process 	<ul style="list-style-type: none"> Automated build and test cycle for any change committed Dependencies are managed Reuse of scripts & tools 	<ul style="list-style-type: none"> Build metrics made available and acted upon No build is left broken 	<ul style="list-style-type: none"> Integration problems are regularly triaged and resolved through automation Faster feedback cycle with improved visibility
Environment & Deployment	<ul style="list-style-type: none"> Manual software deployment process Environment specific binaries Manual provision of environments 	<ul style="list-style-type: none"> Automated deployments to some environments New environment creation is inexpensive All configurations are externalized/ versioned 	<ul style="list-style-type: none"> Fully automated self-service process for software deployment Uniform process for deployment to all environments 	<ul style="list-style-type: none"> Deployment orchestrated and managed Release rollback processes 	<ul style="list-style-type: none"> All environments are managed Fully automated environment provisioning Use of virtualization
Release Management	<ul style="list-style-type: none"> Infrequent and unreliable releases 	<ul style="list-style-type: none"> Release infrequent, sometimes painful but reliable Limited traceability from requirements to release development in cadence 	<ul style="list-style-type: none"> Change management & approval process defined and enforced All compliance conditions are met 	<ul style="list-style-type: none"> Environment and application health monitoring and proactive management Monitoring of cycle time Release on demand capability 	<ul style="list-style-type: none"> Groups collaborate to manage risk and reduce cycle time
Testing	<ul style="list-style-type: none"> Automated test written as part of user story development 	<ul style="list-style-type: none"> Automated test written as part of user story development 	<ul style="list-style-type: none"> Automated unit and acceptance test STLC is integral part of SDLC 	<ul style="list-style-type: none"> Quality metrics and trends are tracked NFRs defined and measured 	<ul style="list-style-type: none"> Production pushes rarely yield defects and never yield high priority defect Quick turnaround of defect fixes in lower environments
Data Management	<ul style="list-style-type: none"> Data migrations done manually Data builds not versioned 	<ul style="list-style-type: none"> Automated test written as part of user story development 	<ul style="list-style-type: none"> Database changes performed automatically as part of deployment 	<ul style="list-style-type: none"> Database upgrades and rollbacks are tested with all deployments Database performance monitored and optimized 	<ul style="list-style-type: none"> Release to release feedback loop of DB performance and deployment process

Contact us at engage@infolob.com to start your DevOps journey!