

DevOps for Defense

August 2019

Atlassian

Patrick Howell
Trund

A ATLASSIAN Partner

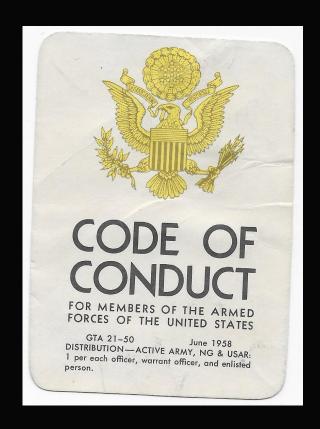
https://devopsfordefense.org https://www.meetup.com/DevOps-for-Defense/ https://github.com/jondavid-black/DevOpsForDefense devopsfordefense@gmail.com https://twitter.com/devops4defense

Sponsored by:



DevOps for Defense Meetup: Code of Conduct

- UNCLASSIFIED ONLY!!!!
- Treat each other with respect and professionalism.
- Do not talk about private, sensitive, or proprietary work.
- Do talk about your experiences, needs, desires to improve work in our domain.
- Do share your thoughts.
- Do learn from others.
- Do respect & tip your bartenders!





DevOps for Defense Meetup: Atlassian



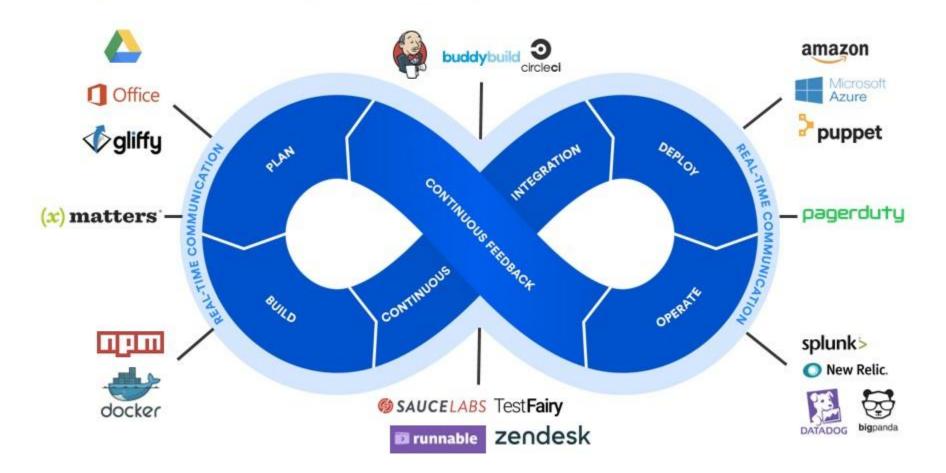


Agenda

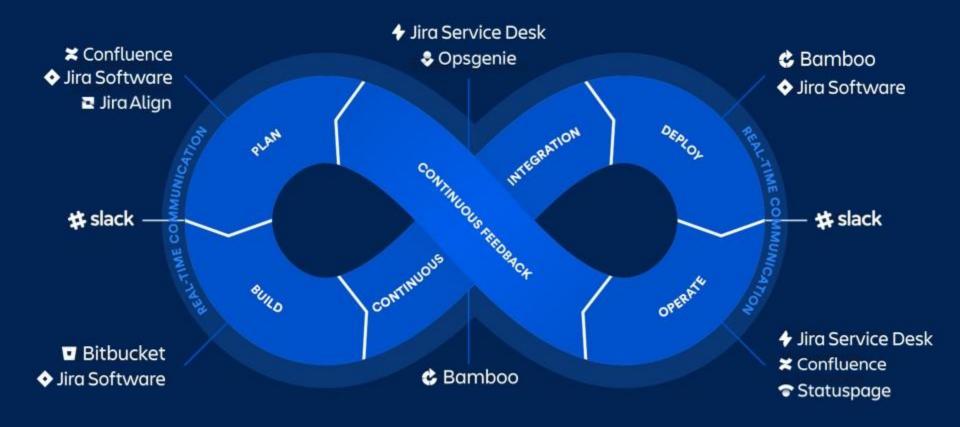
- Meetup Announcements & Introductions 2 min
- Atlassian & Trundl Overviews

 5 min
- Attendee Questions / Goals 8 min
- Scaling Agile w/ Atlassian in Large Orgs 15 min
- Mission Critical Environments 10 min
- Favorite Add-ons & What's New 5 min
- Open Discussion 25+ min

DevOps as it may be in your company



Atlassian is the Culture & Collaboration layer of DevOps







Platinum Solution Partner

COMPANY:

- Founded 2015
- First Atlassian Project, Jira Core Add-on for Dropbox
- 25 Employees
- Offices: Nashville, San Jose, Hyderabad (Vancouver/Atlanta, coming soon)

SELECT CUSTOMERS:







































AMC Health

Atlassian use cases are a mile wide... We're well traveled.

INTEGRATED TOOLS FOR YOUR TEAM & TEAMS AROUND YOU

Agile Product Management ITSM / Help Desk Portals Project Portfolio Managment Marketing / Finance / Legal / HR Tools **Custom Intranets** Asset / Incident Management

PLAN, TRACK, SUPPORT

- ◄ Jira Core Jira Alian
- Jira Software
- ♣ Jira Service Desk
- Statuspage
- Opsgenie

A ATLASSIAN Marketplace

COLLABORATE & CHAT

- **★** Confluence
- □ Trello 非 slack

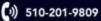
CODE, BUILD & SHIP

- **■** Bitbucket Bamboo
- ▼ Crucible
- Sourcetree









WHY USE AN ATLASSIAN SOLUTION PARTNER?



No Baggage. Independent Approach



Atlassian Certified Teams



Broad Use Case Experience



Ideation. Open up all possiblities



Atlassian Licensing Benefits



Executive Visibility & Buy-in



Hands-on Keyboard



Flexible Support



ATLANTA

Where help is...



TRAINING



DEPLOY **New Instance**



IMPROVE Current Config



UPGRADE Instance



MIGRATE Instance



INTEGRATE 3rd Pty Tools









ENTERPRISE SCALING



INTEGRATIONS & ADD-ONS



CUSTOM DEPLOYMENTS



LICENSE MANAGEMENT



ADMINISTRATION / SUPPORT



PROCESS / AGILE **ENABLEMENT**



ATLASSIAN

PARTNER

TRAINING

The Two Important Takeaways from Today:



The great thing about Atlassian tools is that they are highly extensible & customizable. The Bad thing is hey are highly extensible & customizable.

- Data messes are easy to make.
- Governance is easy ignore.
- There's a million "it would be great if it could..." questions.
- We can help.



We're not a harness...



We lay track...











PLAN

Create user stories & issues, plan sprints, & distribute tasks across your software team.

TRACK

Prioritize and discuss your team's work in full context with complete visibility.

RELEASE

Ship with confidence & sanity knowing the infoyou have is always up-to-date.

REPORT

Improve team performance based on real-time, visual data that your team can put to use.





CUSTOMIZEABLE WORKFLOWS Extensible for automation

	Jira Core	Jira Software	Service Desk
Simple projects	\odot	②	②
Workflow Editing	②	②	②
Powerful Issue Search	Θ	②	⊘
Dashboards	\bigcirc	Ø	Θ
Basic Reporting	\bigcirc	②	⊘
Agile Boards		⊘	
Backlog Planning		⊘	
Agile Reports		\bigcirc	
Development Tool Integration		②	
Release Hub		⊘	
Queues & SLAs			⊘
Confluence Integration			②
Detailed Metrics			⊘

Jira

Jira Service Desk

Productize & streamline all services your teams provide for customers or stakeholders, whether they're internal or external. Any work that has a standard intake and documented process (however complicated) can be run with Jira Service Desk. Autonomy for your team + Visibility for your customers / stakeholders



Simpler Self-Service

Give your customers an effortless service experience



Automation

Keep tabs on every ticket, don't let incidents snowball



Ticket Management

Best-in-class ticket management and queues for fast resolution



Powerful SLAs

Get started quickly with out-ofbox service level agreements or create your own



Effective Knowledge

Capture, create, and share knowledge with agents, experts and employees



Fast setup

Easily spin up a service desk and add value now without the need for lengthy consulting

Simple Customer Portal



Workflows 100% Customizable

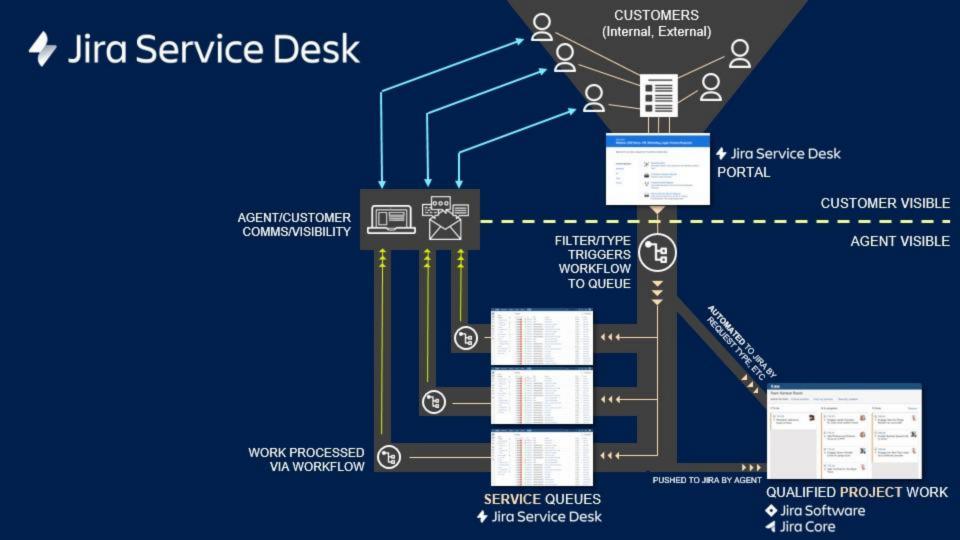


JIRA Service Desk Agent Queue

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Jira Kanban Board (Projects)







A collaboration wiki & document space. Organize ideas, define reqs, centralize docs to build better products, engage on tasks, or keep records

USE IT FOR

- Meeting Minutes
- Milestones / Schedules

- · To-do Lists
- Design DocsData / Specs
- Build How To's
- Doc. Control
- · HR Documents
- IT Self Service
- Feedback Forums

customers

· Previous Research

Software Teams

Business Teams

IT Teams

FUNCTIONAL USE

HOW CONFLUENCE HELPS

Assemble ideas, product reqs & documentation to build better products

Organize ideas and iterate product requirements, sprint planning, retrospectives, ideas, mockups. Add images, code blocks, Office files, & rich content

Enhance JIRA

- Feed actionable dev issues/steps with team content
- Traceability btw. reqs & issues
- Version history, roll-back
- Broadcast project status to teams (dynamic JIRA reports)

Plan projects, gather feedback & communicate status to share knowledge

Organize the team's work by creating pages to structure each projects with controlled access

Plan the next project with proposals, timelines, meeting notes and status reports

Solicit & gather feedback and keep the team informed

Keep in the loop, and on plan with visibility

Centralize documentation and policies to better support and service

Knowledge Base: Create and organize policies and documentation:

- Author rich pages with images, videos, code, etc.
- Work from our templates, repurpose your previous work, or start from scratch

An integrated knowledge base for your IT Service Desk

- · Faster, searchable self-service
- Ticket deflection saves support agents time

Notable Acquisitions

Opsgenie

Acquired late 2018

A comprehensive **Incident Management solution** that allows you to integrate with **200+ monitoring / listening tools** and provides an interface for your teams to **swarm incidents** quickly, collaborate and prioritize responses and tasks, and to keep progress visibility.

- If you run an "always-on" service and in previous incidents, you have had trouble corralling teams, resolving quickly, and sharing updates, this is your tool. Highly extensible to incident risk areas in both the hardware and application space.
- Atlassian abandoned the communications space (ie HipChat) because they knew the strategic importance and opportunity of the ITSM/DevOps space. The acquisition of Opsgenie is a big part of that.

Jira Align

Acquired 2019, previously AgileCraft

In a word: Gamechanger.

Now you can systemically align Org Strategy + Projects + Product Roadmaps + "the Work" into a single, systemic collaboration tool. It's BI, Predictive Analytics & Portfolio Mgmt wrapped into 1.

For Enterprise Agile Planning, it...

- Solves many Status Insights & Cost Management problems that manifest from post-agile transformation to roll up PPM & Executive level views in larger organizations. In real time, it does what your most outstanding PPM & BI leads would get from Jira
- Improves Cross-team Development Dependency Management by making dependencies tangible and workable.
 Feeds into improved planning + predictive risks to delivery.
- Calculates Projected Costs based on historical data & current scope. Ensures investment in IT resources is highly visible
- Leverages the power of "why" for development teams across the org. Starting at Strategy – all work in Jira maintains alignment with an overall organizational business goal & strategy. There's even a "why" button.

Favorite Add-ons from the A ATLASSIAN Marketplace



PROFORMA FOR JIRA

Enable custom form/ checklist creation of key pieces of info that your customer/ requestor can also edit via the portal (without needing a Jira license). Married to automation, it's very powerful.



AUTOMATION FOR JIRA

Automate work creation for other teams at a certain stage of the process/workflow. Can work with any combination of data, triggers, values or combination thereof.



DRAW.IO FOR CONFLUENCE

Top Confluence Add-on. All diagram, workflow, flowchart, wireframe, etc. features of Draw.io integrated with Confluence



FOR JIRA SERVICE DESK

Dynamic field configurations. Helpful in a variety of ways. Show/hide fields based on selections, etc, improve customer experience.



XRAY TEST MANAGEMENT FOR JIRA

Manage manual and automated tests as Jira issues. Create test plans & tracking, consolidate results from different environments. Use interactive charts on requirements.



Scaling Agile with Jira/Atlassian

COMMON HURDLES

- Environmental Configuration
 - Nobody can measure anything. Not configured to tell a story at the macro level
- Infrastructure setup / administration
- Lack of awareness of addons / integrations the organization needs at Scale.
- Governance / Standardization
 - Don't ruin my ant hill!
- Transitioning from DIY to DIR



RECOMMENDED APPROACH

Atlassian tools are best configured when you start at the top...

- Decision management goals
- Work-Life balance goals
 - Agile methodology & Atlassian tools enable this!
- Land & Expand: Atlassian is bottom-up, not top down, unlike traditional enterprise software.

Prepare Teams for using Jira

- Enable business by managing intakes (Jira Service Desk)
- Configurations simple at first. Get teams used to nomenclature, navigation. Get feedback & run intentional improvements.

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Mission Critical Environments & Atlassian Data Center

ASK THESE QUESTIONS:

- 1. Has your Atlassian deployment grown to support 100's of users handling thousands of issues?
- 2. Are other departments adopting Atlassian solutions?
- 3. Has Jira, Confluence, Bitbucket, Crowd, or Jira Service Desk become mission-critical throughout the org, making performance and availability essential?

This is the tipping point to move to Data Center, Atlassian's enterprise-grade deployment option, to strengthen the scalability and high availability of your operation.

Mission Critical Environments & Atlassian Data Center

HIGH AVAILABILITY TO SUPPORT THE MISSION

- If one node fails, users are immediately redirected to another active node.
- Mirrored systems can be configured with scheduled data replication and automated or manual startup in the event of a failure
- Admins no longer need to defer upgrades to evenings or weekends. Rotating maintenance activities through Jira nodes one at a time preserves mission uptime.
- From search re-indexing to major upgrades, Atlassian Data Center reduces mission impact with zero downtime and no loss of productivity.

INSTANT SCALABILITY: EXPAND & SUPPORT W/O IMPACT

- Expand the user base without interruption and simplifying employee workflows.
- The multi-node architecture lets you instantly add nodes to your cluster with zero downtime or performance impact.
- Deploy nodes on bare metal, virtual machines, Amazon AWS/GovCloud, Microsoft Azure, or other cloud services.
- Resources adjust to where they're needed.
- Easily audit user access and troubleshoot permissions
- Immediately activate or disable access to all resources in a single step.
- Security assertion markup language (SAML) single sign on (SSO) support improves login security and authentication by integrating with your identity management provider

What's new in Atlassian

Jira Software 8.4 / Jira Service Desk 4.4 (Released August 26)

- Expanded archiving capabilities with issue archiving (available for Data Center), you can...
 - Archive individual issues
 - Use JQL queries to collect and archive issues as a bulk action
 - Automate archiving issues through APIs

Confluence 7.0

- Automatic clean up of Synchrony data for improved concurrent editing
- Privacy compliance: Delete personally identifiable information (PII)like usernames and images, when needed, so your teams can collaborate without compromise and you can meet your organization's GDPR & privacy needs (Distributed teams (DC): Integrate with a content delivery network (CDN) to provide an accelerated experience for distributed teams and remote users, and reduce peak load on your primary application instances
- Visibility and controls (DC): With additional permissions features, easily manage granular permissions at the page and space levels, audit access levels and troubleshoot when needed (7.x).

Bitbucket Server 6.4

- New built-in announcement banner
- Update to Git LFS file locking

End of Life, November 15th

 Jira Software 7.6 & Jira Service Desk 3.9 versions for Server and Data Center

Portfolio for Jira (Server / DC 3.3 & 3.4)

Improvements were...

- Enhanced portfolio permissions
- Persistent sprint headers
- New release groupings
- Filtering for unsaved issues
- · Better viewing of issues in plans
- Settings for scheduling dependencies
- Quick filtering for dependencies and sprints

Open Discussion:

Topics:

- Workflow consolidation in large orgs
- DevOps / SecOps
- Atlassian & globally distributed teams
- []



Manohar Goli is the Head of Atlassian for DNFCS, running multiple projects, including hosting migrations, upgrades, and Data Center deployments. Manohar has 10 years of IT and project mgmt experience, and currently oversees 14 Atlassian Engineers. Manohar lives in Atlanta, GA



Jeff Pittman is Head of CSAD with a focus on Agile enablement, process and efficiency. Jeff has past technology & project management leadership positions with Cracker Barrel, Asurion, Kirkland's and more, and is currently working with clients such as Los Alamos National Laboratory, Lowes, MedeAnalytics, to name a few. Jeff lives south of Nashville, TN

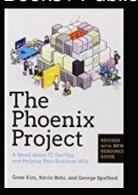


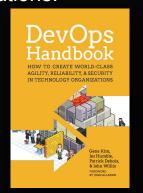
Patrick Howell is the CEO of Trundl, and has 15 years of Marketing & Business Development experience in Technology. Patrick lives in Nashville

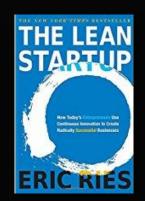
DevOps Resources

https://devopsfordefense.org/resources/

Books / Publications:









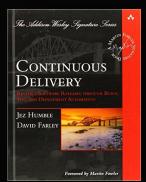
Conference Presentations (YouTube):

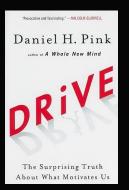
- DevOps Enterprise Summit (DOES)
- IT Revolution
- Velocity
- GoTo

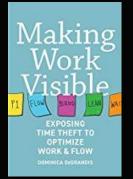




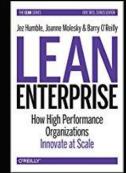


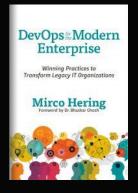












Backup

STEPS TO DEVOPS



CULTURE

A core ingredient for successful implementation



PRACTICES

Have methods in place that allow collaboration to thrive.



TOOLS

The right tools help speed up your releases by automating menial tasks and defining set processes.



Agile



Distributed Version Control

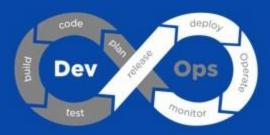


Continuous Integration

DevOps

DevOps is a type of agile relationship between development & IT operations (agnostic to approach)

The guiding principles of DevOps include culture, measurement, automation and sharing.



DevOps best practices:

- Automated Delivery Pipeline
- Microservices
- Infrastructure as Code
- Monitoring and Logging
- Communication and Collaboration

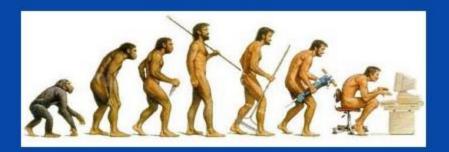
ITSM

IT Service Management is characterized by adopting a "process approach" towards management, focusing on customer needs and IT services rather than IT systems, and stressing continual improvement.

ITSM employs a workflow management system for handling incidents, service requests, problems and changes, and DOESN'T rely on Heros!



Think of technology trends toward Service Management...



The way it used to be...



The way it's going...

TRADITIONAL HELP DESK (Tactical)

- IT teams do service requests
- Included IT tickets, select business requests
- Ticket supply exceeded IT resources
- IT team became reactive
- Squeaky wheel gets the oil syndrome
- "IT is difficult to work with"

SERVICE REQUEST MGMT (Tactical + Strategic)

- Simple portals
- · Simple self service
- Access to knowledge base suggestions
- Streamlined request fulfillment
- Tools adaptable to any team to provide a service catalog, and open it to anyone they define as a customer

What are Service Requests to your team? Think of your home...

What of your team's work is purposespecific and drives long-term value?





PROJECT WORK

Functional-specific, self-initiated, collaborative work. Variable in scope, goals, outcomes, etc.

Success Criteria

- Strategic Initiatives
- · Long-term growth
- Innovation
- Differentiation

...and what work equates to chores and is just "part of the job"?





SERVICE REQUEST WORK

Catalog of repeatable, process-compliant, timebound tasks done for other teams or customers...

Success Criteria

- Ability to Automate
- · Standardize Intake
- · Reduce Costs, Cycle Faster
- Ensure CSAT

These should be SEPARATE workstreams, processed / measured differently...



Tips for setting up your team with Jira Service Desk

1. Start with the commonly requested items

- · Simple and easily fulfilled
- Gets your team used to the tool & establishes KB

2. Document your service request catalog's requirements

- Data, approval process, fulfillment procedures, stakeholders, process owner, SLAs, reporting, etc.
- Be aware of special requirements in different situations

3. Capture critical data needed to start the request

- Don't overload the customer w/ too many questions.
- 4. Standardize the approval process where possible.

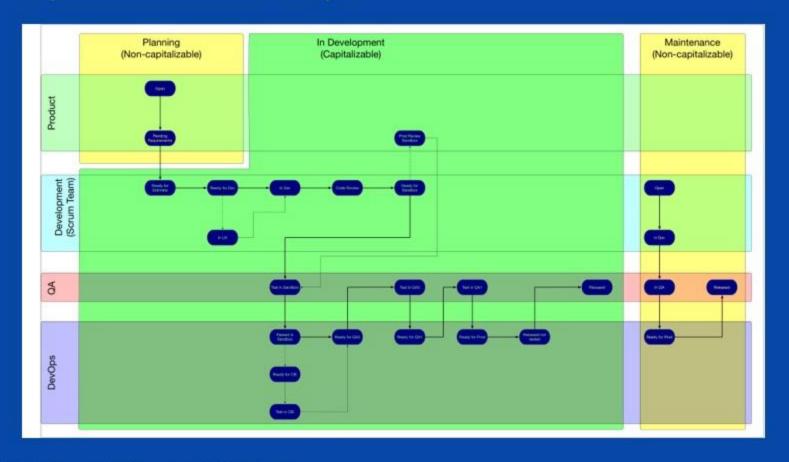
5. Identify what knowledge information should be available

- Build your knowledge base so you can deflect requests you want to deflect
- 6. Review Service Level Agreements (SLAs)
 - Proper measurements and notifications make for happy customers

7. Identify what reporting is needed



Capitalization Workflow Sample



Installation / Hosting Consultation



Atlassian's cloud hosted solution, where everything is made available to you on your-entreprise atlassian.net.

STRENGTH WEAKNESSES

Quick Setup Restrained Add-on List

Automatic Impossible to Integrate your LDAP Directory

No Access to JIRA
External Database
Hosting (advanced reporting
purposes)

Limited to 2000 Users

Server / OnPremise



Direct installation on your server (local/remote). Several files at disposal, matching available distributions: Installer, Standalone or WAR.

STRENGTHS WEAKNESSE

All Atlassian
Marketplace
Add-ons
available

Control over
Upgrades

Advanced

WEAKNESSE

Infrastructure to
Install &
Maintain

Manual
Upgrades

Advanced

A ATLASSIAN DATACENTER

Ideal for 500 user organizations and above with highly active, dependent users who cannot afford even short term downtime.

STRENGTHS

Customizations

WEAKNESSE

Distributed Load Priced for Enterprises

Active-Active Clustering

Redundancy

Concurrent User Capacity,

Predictable, User Cost

Public Cloud



STRENGTHS WEAKNESSES Limited DB Access Use any add-on Available on (For reporting Marketplace purposes) Control over upgrades Secure External Hostina (99.995% uptime) Advanced, Active Support Bi-annual Instance Audit --- Price Includes Server Rental ---(*but lower total cost of ownership/service)

Available Options

- HOSTING ONLY- You handle all upgrades & administration
- HOSTING, UPGRADES & SERVER MANAGEMENT- We manage all upgrades & patches; you admin.
- HOSTING, UPGRADES, SERVER MANAGEMENT & REMOTE ADMINISTRATION- We manage it all.