From Open Source to Inner Source

How Open Source ONAP Has Changed Amdocs

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AT&T’s ECOMP co-created by AT&T and Amdocs
ONAP to become the de-facto industry standard open source platform for NFV/SDN automation
We had to redesign our culture
Open source – modes of engagement

- **Lead**: initiate and moderate NEW open source projects
- **Contribute**: bug fixes, patches and code enhancements to (existing) open source projects
- **Consume**: include open source code in products or services
1. Automation script doesn’t run
2. Operations notifies engineering
3. Engineering notifies VNF vendor tech support
4. Tech support discusses with product manager
5. VNF product manager discusses with orchestrator product manager
6. Development starts on both sides
7. Testing
8. F2F meeting to triangulate the issue

Troubleshooting an NFV issue – with closed source

VNF vendor: Product management, Development, Testing, Tech support
Customer in production: Operations, Engineering
Proprietary/closed code orchestrator: Product management, Development, Testing, Tech support
Troubleshooting an NFV issue – with open source

1. Automation script doesn’t run
2. Due to automation script problem, Operations notifies engineering
3. Engineering notifies VNF Vendor tech support
4. VNF vendor contributes code in order to fix the problem
Troubleshooting an NFV issue – with open source

- VNF vendor
- Customer in production
- Open source Orchestrator
- DevOps Development & Operations
Troubleshooting an NFV issue

Massively deployed open source

Proprietary/closed source

Open source accelerates the speed of innovation
Troubleshooting NFV issue

Massively deployed open source

Proprietary / closed source
We then realized...

...that we need to change course of internal development as well
Extremely complex process of incident handling

1. **Service desk** team identifies an issue

2. **Service restoration**
   2a. Triage with operation, IT, infra, ADM, vendors, customer
   2b. Work around solution by ADM or infra
   2c. Testing the work around
   2d. Deployment

3. **Permanent fix**
   3a. Triage w. Services, Delivery and Product
   3b. Fix development
   3c. Production
TTM without inner source
Simple fix requested by a customer

~3 DAYS
Development effort

Many Emails

Handful of Employees actively involved

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# of Software Engineers in the discussion

~26.3 Days
from first reference to production
From spaghetti to efficiency
So… why inner sourcing?
Because of the

- Improve Productivity
- Innovation
- Agility
- Modernize Org. Culture
- Improve Security
- Code Quality
How to inner source?
Open source foundation roles

- Technical Steering Committee (TSC)
- Project Technical Lead (PTL)
- Committer
- Contributor
We redesigned our culture
CULTURE!

STRATEGY!!!
Thank you