
1 Intro

Cloud Developer Survey

If you work with or on cloud platforms, we would highly appreciate it if you fill out our following short survey. Our aim is to better understand how software is built for the cloud to provide better support for software developers.

This survey should only take about **10-12 minutes** of your time. With your participation, you get the chance to enter in our **lottery to win one of two 50\$ Amazon Gift cards** at the end of the survey.

We will handle your responses confidentially and ANONYMIZE all collected data before publishing it. We will NOT attribute answers to any particular participant. At the end of the survey, you may provide your email address voluntarily if you wish to participate in the lottery and/or in case you wish to be contacted about the survey results.

We greatly appreciate your participation.

This survey is being conducted by Prof. Harald Gall, Prof. Thomas Fritz, Dr. Philipp Leitner and Jürgen Cito from the University of Zurich in Switzerland

Please feel free to contact Jürgen Cito or Thomas Fritz if you have any further questions

2 Demographics

What job role title fits you best?

- Developer
- Operations Engineer
- Tester
- Product Owner

Team Lead

Other

What is the size of the company you are working for?

- 1-20 employees
- 21-99 employees
- 100-1000 employees
- over 1000 employees

How many years of professional software development experience do you have?

How many years of experience do you have in developing for the cloud?

How many people work approximately on the project you are primarily working on?

- 1-10
- 11-25
- over 25

Are you / your team currently a provider of a cloud service and if so, what best classifies the kind of cloud service you provide?

(SaaS for instance Google Docs, Dropbox, etc. | IaaS for instance Amazon EC2, Rackspace, etc. | PaaS for instance Google App Engine, Heroku, etc.)

- SaaS (Software as a Service)
- PaaS (Platform as a Service)
- IaaS (Infrastructure as a Service)
- I am not a cloud service provider

Are you / your team currently a user of a cloud service and if so, what best classifies the model of the service used?

(IaaS for instance Amazon EC2, Rackspace, etc. | PaaS for instance Google App Engine, Heroku, etc.)

- IaaS (Infrastructure as a Service)
- PaaS (Platform as a Service)
- I am not using any cloud service

3 Cloud Differences

We want to explore how developing applications in the cloud is different from developing in a traditional environment.

What are the main differences for you when developing an application for the cloud as opposed to non-cloud environments?

4 Process, Communication and Team Dynamics

Software Development Processes

In our project we are using an agile process to develop applications for the cloud

(SCRUM, Kanban, XP, ...)

- Disagree
- Somewhat disagree
- Somewhat agree
- Agree
- I don't know

The process we used before developing applications for the cloud was also agile

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree
- I don't know

Since moving to the cloud, our software development process is more agile

- Strongly disagree
- Disagree
- Agree
- Strongly Agree
- I don't know

5 Release Management

Release Management

Since developing applications for the cloud, we have faster releases / shorter release cycles (more continuous delivery)

- Strongly disagree

- Disagree
- Neutral
- Agree
- Strongly Agree
- I don't know

How often do you release software since you moved to the cloud?

- Multiple times a day
- A few times a week
- A few times a month
- A few times a year
- Less than once a year

How often did you release before you moved to the cloud?

- Multiple times a day
- A few times a week
- A few times a month
- A few times a year
- Less than once a year

Since moving to the cloud, it takes less time until a new feature is visible for the customer

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
- I don't know

We can react to changing customer demands quicker since we moved to the cloud

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
- I don't know

Customers have higher expectations and in particular expect more frequent releases (e.g., features, bug fixes) since moving to the cloud

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
- I don't know

6 Impact on Development of an Application

Impact on Development of an Application

Since moving to the cloud, there is more communication/interaction between developers that write application code and operations engineers

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
- I don't know

Since moving to the cloud, operations and application development is handled by the same staff

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- I don't know

Since moving to the cloud, our team is more limited in the technologies we can use (e.g. databases, message queues)

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- I don't know

Since moving to the cloud, our team is more limited in how we architect and design our applications

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- I don't know

The cloud automatically handles variations in the load for us

(With load we mean incoming traffic, throughput, customers per minute/hour, etc.)

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- I don't know

Explain the most significant restrictions you have encountered when developing cloud applications

7 Tools and Data

Tools and Data

We're interested in what kind of tooling you are using in the cloud and what data (feedback, metrics, etc.) you look at on

a regular basis

Since moving to the cloud, when trying to identify the root-cause of a bug, access to production data (e.g. logs, production databases) is ...

- Much harder
- Harder
- Same as before
- Easier
- Much easier
- I don't know

Since moving to the cloud, more information on production systems (e.g. monitoring data/metrics, logs) is available

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- I don't know

Since moving to the cloud, I look at more metrics on production systems than before

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- I don't know

Metrics on the following data are important to me

Performance = How long a certain operation took to execute

Load = Throughput, Requests per Minute, etc.

Functional Usage = How often a feature or method has been used in production

Cost of Operation = The resulting cost of operating a service)

Performance	<input type="radio"/> Strongly disagree	<input type="radio"/> Disagree	<input type="radio"/> Neutral	<input type="radio"/> Agree	<input type="radio"/> Strongly agree	<input type="radio"/> I don't know
Load	<input type="radio"/> Strongly disagree	<input type="radio"/> Disagree	<input type="radio"/> Neutral	<input type="radio"/> Agree	<input type="radio"/> Strongly agree	<input type="radio"/> I don't know
Functional Usage	<input type="radio"/> Strongly disagree	<input type="radio"/> Disagree	<input type="radio"/> Neutral	<input type="radio"/> Agree	<input type="radio"/> Strongly agree	<input type="radio"/> I don't know
Cost of Operation	<input type="radio"/> Strongly disagree	<input type="radio"/> Disagree	<input type="radio"/> Neutral	<input type="radio"/> Agree	<input type="radio"/> Strongly agree	<input type="radio"/> I don't know

8 Tools and Data 2

Tools and Data

In my development activities I use the following metrics on a regular basis

Performance = How long a certain operation took to execute

Load = Throughput, Requests per Minute, etc.

Functional Usage = How often a feature or method has been used in production

Cost of Operation = The resulting cost of operating a service)

Performance	<input type="radio"/> Strongly disagree	<input type="radio"/> Disagree	<input type="radio"/> Neutral	<input type="radio"/> Agree	<input type="radio"/> Strongly agree	<input type="radio"/> I don't know
Load	<input type="radio"/> Strongly disagree	<input type="radio"/> Disagree	<input type="radio"/> Neutral	<input type="radio"/> Agree	<input type="radio"/> Strongly agree	<input type="radio"/> I don't know
Functional Usage	<input type="radio"/> Strongly disagree	<input type="radio"/> Disagree	<input type="radio"/> Neutral	<input type="radio"/> Agree	<input type="radio"/> Strongly agree	<input type="radio"/> I don't know
Cost of Operation	<input type="radio"/> Strongly disagree	<input type="radio"/> Disagree	<input type="radio"/> Neutral	<input type="radio"/> Agree	<input type="radio"/> Strongly agree	<input type="radio"/> I don't know

Are there any other data/metrics that are important to you that were not mentioned above?

(Please name as many different kinds of data / metrics as are important to you)

Are there any data/metrics that would be interesting for you but are not easily accessible?

(Please name as many different kinds of data / metrics as are interesting for you)

9 Tools and Data 3

Tools and Data

Since developing for the cloud, I am using more tools in the cloud

Developer Tools for Monitoring, Log Aggregation, Debugging, etc. (e.g. WebIDE, NewRelic, Loggly)

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- I don't know

Which tools do you use specifically for development for the cloud that you did not use before?

10 Closing

Wrap-Up

If you want to enter in a drawing to win one of two 50\$ Amazon Giftcards, please provide us with your email address

Would you like to receive an email when we publish the results of our survey?

Please provide your email above if you want to receive a notification with the published results

- Yes
- No

11 Endseite

Thank you!

Thank you very much for helping us out with our survey. We appreciate your time.

Jürgen Cito, Philipp Leitner, Thomas Fritz and Harald Gall from the University of Zurich in Switzerland
