Healthcheck Endpoints For Apps

What is this?

In order to properly monitor the health of our services and applications, we should be putting healthcheck endpoints into each and every deployable that can be targeted by outside apps. These should be simple endpoints accessible by HTTP GET calls which return information about the currently running app.

How should this be implemented?

There's 2 categories of health check that should be present in each app:

1. **Basic**: This reports the very basic up/down status of the app.
2. **Extended:** This reports in greater detail the current status of the app and environment.

Any data returned in a response body should be JSON formatted.

The Basic Healthcheck

The basic healthcheck will be monitored constantly, and as such should not invoke any complexity that could potentially encumber the app itself. No downstream services or dependencies should be monitored or relied upon to manage this endpoint, only static information that can be readily served by the app.

Do not invoke any service calls or other components outside of the application server itself to complete this request.

Basic healthchecks can be used to take **automated actions** such load balancing

Examples of information that could be provided are:

- Up/Down (simple HTTP 200 response would suffice)
- Currently running version number or git SHA
- Last deployment time
- Uptime
- Environment information (ex PHP or .NET runtime versions, configuration options, non-secret environment variables): **note** be extremely careful with what is exposed here. If you're afraid this endpoint could be targeted by the general public err on the side of caution when choosing to provide details.

The Extended Healthcheck

The extended healthcheck should give greater detail than the basic healthcheck above, and tell the consumer enough information to be reasonably sure that this application can fulfill it's full range of responsibilities.

Do not use extended healthchecks to control load balancing or automated instance health.

Extended healthchecks should be used to provide metrics and monitoring abilities to team members (e.g. statuspage.io or other dashboard systems).

Examples of information that could be provided are:

- Status of connectivity to data stores and other software dependencies (ex. Dynamo DB, UM queues, SQL Server instances, cache servers, Eternia).
- Status of connectivity to critical downstream services (ex. app specific midwares, QKS, Submission Engine)

Information that probably doesn't belong in either place

The following should be monitored and measured by other tools, such as AppDynamics, StatsD, AWS XRay, Splunk, or not at all (secrets).

- Performance metrics and data.
- Server resource information (memory, disk space, etc.)
- Log data
- Secret or privileged information (don't expose app keys, ids, or usernames)
- Any counters or aggregated time-series information. Stateless only.

Fantastic Four Inventory

The following are apps that should be monitored via healthcheck endpoints for the True Rocket Fantastic Four Launch:

App	Basic HC Url(s)	Extended HC Url(s)	Conn (if needed)

Rocket Mortage **Application** - WEB			Evan Steiner
Rocket Mortgage **Application** - .NET Midware API			Evan Steiner
Rocket Mortgage **Application** - .NET Listener			Evan Steiner
Rocket Mortgage **Application** - nodeJS API	• Basic: DONE https://rmapi.np.rocketmortgage.com/health/basic https://rmapigwi.np.rocketmortgage.com/health/basic *Note: only accessible with AWS IAM credentials*	• Extended: IN PROGRESS... (waiting for downstream dependencies to finish their basic health endpoints)	Ross Anthony Manali Sapre
Rocket Mortgage **Origination** (MyQL) - WEB	Projected URL: https://originationtest.rocketmortgage.com/health/basic TEST - DONE BETA - DONE PROD - IN PROGRESS	Projected URL: https://originationtest.rocketmortgage.com/health/extended NOT STARTED	Erica Hudson-Biggens Joe Rieger
Rocket Mortgage **Origination** (MyQL) - .NET Midware API	https://myqlmwapitest.rockfin.com/Health/MyQLFrontendInterface/Basic DONE https://myqlmwapibeta1w1.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Basic DONE https://myqlmwapibeta2w1.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Basic https://myqlmwapiprod1w1.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Basic DONE https://myqlmwapiprod1w2.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Basic https://myqlmwapiprod2w1.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Basic https://myqlmwapiprod2w2.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Basic	https://myqlmwapitest.rockfin.com/Health/MyQLFrontendInterface/Extended IN PROGRESS https://myqlmwapibeta1w1.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Extended NOT STARTED https://myqlmwapibeta2w1.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Extended} https://myqlmwapiprod1w1.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Extended NOT STARTED https://myqlmwapiprod1w2.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Extended https://myqlmwapiprod2w1.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Extended https://myqlmwapiprod2w2.mi.corp.rockfin.com/Health/MyQLFrontendInterface/Extended	Annette Heidenreich Ninad Kulkarni
Rocket Mortgage **Origination** (MyQL) - .NET QTweet Processor	https://myqlmwapitest.rockfin.com/Health/MyQLQTweetConsumer/Basic DONE https://myqlmwapibeta1w1.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Basic DONE https://myqlmwapibeta2w1.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Basic https://myqlmwapiprod1w1.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Basic DONE https://myqlmwapiprod1w2.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Basic https://myqlmwapiprod2w1.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Basic https://myqlmwapiprod2w2.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Basic	https://myqlmwapitest.rockfin.com/Health/MyQLQtweetConsumer/Extended IN PROGRESS https://myqlmwapibeta1w1.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Extended NOT STARTED https://myqlmwapibeta2w1.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Extended https://myqlmwapiprod1w1.mi.corp.rockfin.com/Health/MyQLQtweeConsumer/Extended NOT STARTED https://myqlmwapiprod1w2.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Extended https://myqlmwapiprod2w1.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Extended https://myqlmwapiprod2w2.mi.corp.rockfin.com/Health/MyQLQtweetConsumer/Extended	Annette Heidenreich Ninad Kulkarni
Rocket Mortgage **Servicing** (MyQL) - WEB	https://servicingtest.rocketmortgage.com/health-check (Completed. Reviewing it)		Joe Seto Kannan Parthasarathy
Rocket **Accounts** - WEB	Working with Derrick and Shawn Alam on documenting what has been set up for Ping and the API.		Unknown User (cnassouri) Jill Toth
Rocket **Accounts** - API			Unknown User (srester) Jill Toth

<table>
<tr><td>Rocket Accounts - Ping Directory</td><td>Metrics Server - This only accessible via a jump box. We are currently generating alerts and can widen distribution as needed.

CloudWatch - This only accessible via a jump box. We are currently generating alerts and can widen distribution as needed.

SplunkLogs - no alerts are currently set up.</td><td></td><td></td></tr>
<tr><td>Rocket Accounts - Admin Panel</td><td></td><td></td><td>Unknown User (srester)

Jill Toth</td></tr>
<tr><td>Rocket Mortgage Dashboard - WEB</td><td>https://dashboardtest.np.rocketmortgage.com/healthcheck</td><td>not started</td><td>Daniel Sims

Erica Hudson-Biggens</td></tr>
<tr><td>Rocket Mortgage Dashboard - API</td><td>https://chpapigwtest.np.rocketmortgage.com/healthcheck/basic DONE

https://chpapigwbeta.np.rocketmortgage.com/healthcheck/basic DONE

https://chpapigw.rocketmortgage.com/healthcheck/basic DONE

Note: only accessible with AWS IAM credentials</td><td>NOT STARTED</td><td>Unknown User (vgowrimanoharan)

Ninad Kulkarni</td></tr>
<tr><td>Launchpad Mobile API - Rocket Mortage</td><td>We are currently removing functionality from this service. Adding healthcheck at this point has been decided against by the support teams.</td><td>We are currently removing functionality from this service. Adding healthcheck at this point has been decided against by the support teams.</td><td>Andrew Nowak

Daniel Lee</td></tr>
<tr><td>Launchpad Mobile API - Origination</td><td>https://origination{env}.rocketmortgage.com/api/health/basic

<table><tr><th>Env</th><th>Env Str</th><th>Status</th></tr><tr><td>test</td><td>"test"</td><td>Done</td></tr><tr><td>beta</td><td>"beta"</td><td>Done</td></tr><tr><td>prod</td><td>""</td><td>not Done</td></tr></table></td><td>https://origination{env}.rocketmortgage.com/api/health/extended

<table><tr><th>Env</th><th>Env Str</th><th>Status</th></tr><tr><td>test</td><td>"test"</td><td>Done</td></tr><tr><td>beta</td><td>"beta"</td><td>Done</td></tr><tr><td>prod</td><td>""</td><td>not Done</td></tr></table></td><td>Andrew Nowak

Daniel Lee</td></tr>
<tr><td>Launchpad Mobile API - Servicing</td><td>https://servicing{env}.rocketmortgage.com/api/health/basic

<table><tr><th>Env</th><th>Env Str</th><th>Status</th></tr><tr><td>test</td><td>"test"</td><td>Done</td></tr><tr><td>beta</td><td>"beta"</td><td>Done</td></tr><tr><td>prod</td><td>""</td><td>not Done</td></tr></table></td><td>https://servicing{env}.rocketmortgage.com/api/health/extended

<table><tr><th>Env</th><th>Env Str</th><th>Status</th></tr><tr><td>test</td><td>"test"</td><td>Partial Done</td></tr><tr><td>beta</td><td>"beta"</td><td>Partial Done</td></tr><tr><td>prod</td><td>""</td><td>not Done</td></tr></table></td><td>Andrew Nowak

Daniel Lee</td></tr>
<tr><td>Launchpad Mobile API - Common</td><td>https://mobile{env}.rocketmortgage.com/api/health/basic

<table><tr><th>Env</th><th>Env Str</th><th>Status</th></tr><tr><td>test</td><td>"test"</td><td>Done</td></tr><tr><td>beta</td><td>"beta"</td><td>Done</td></tr><tr><td>prod</td><td>""</td><td>not Done</td></tr></table></td><td>https://mobile{env}.rocketmortgage.com/api/health/extended

<table><tr><th>Env</th><th>Env Str</th><th>Status</th></tr><tr><td>test</td><td>"test"</td><td>Done</td></tr><tr><td>beta</td><td>"beta"</td><td>Done</td></tr><tr><td>prod</td><td>""</td><td>not Done</td></tr></table></td><td>Andrew Nowak

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