Anatomy of a Modern PHP Application Architecture

WEB SERVER

CONFIGURE & VIEW
- Navigate to AppDynamics Exchange
- Search for your server
- Download and Install extension
- Navigate back to AppDynamics Controller
- Analyze > Metric Browser
- Find your extension

CACHE

CONFIGURE & VIEW
- Navigate to AppDynamics Exchange
- Search for your server
- Download and Install extension
- Navigate back to AppDynamics Controller
- Analyze > Metric Browser
- Find your extension

VIEW
- Navigate to Application Flowmap
- View latency to your cache server

PHP

TRANSACTIONS

CONFIGURE BUSINESS TRANSACTIONS
- Navigate to Business Transactions
- Right-click Transaction
- Choose configuration options to organize transactions

CONFIGURE TRANSACTION DISCOVERY
- Configure > Instrumentation > Transaction Detection > Select PHP Tier
- Scroll down to Custom Rules
- Create rules to group, match and exclude your transactions

CONFIGURE FRAMEWORK SUPPORT
- Configure > Instrumentation > Transaction Detection >
- Select 'Use Custom Configuration'
- Enable PHP MVC, Drupal or Wordpress

CONFIGURE TRANSACTION API
- Use the custom API functions to manually define the beginning and ending of a transaction from within your code
- Navigate to Business Transactions to view

Hint: This is useful in cases where you have a transaction executing jobs in an infinite loop and want to register each job as a transaction.

ERRORS

VIEW RUNTIME ERRORS
- Troubleshoot > Errors > Error Transactions
- Double-click Transaction Snapshot
- Drill Down > Error Details

VIEW UNCAUGHT EXCEPTIONS
- Troubleshoot > Errors > Exceptions
- Double-click Exception
- Double-click Transaction Snapshot
- Drill Down > Error Details

CONFIGURE ERROR REPORTING
- Configure > Instrumentation > Error Detection > PHP - Error Detection
- Configure Runtime Error Threshold (Notice, Warning, Fatal Error)
- Configure Ignored Exceptions or Logged Messages

SLOW CODE EXECUTION

VIEW
- Application Dashboard > Transaction Snapshots > Show Filters
- Select search criteria > Search
- Double click Transaction Snapshot
- Start Drill Down > Call Graph OR Hot Spots

PHP CLI

CONFIGURE PHP CLI
- Configure > Instrumentation > Transaction Detection > Select PHP Tier
- Scroll down to Entry Points
- Enable PHP CLI

VIEW PHP CLI
- Navigate to Business Transactions
- View PHP CLI Transactions named after the executed PHP script

DATABASE

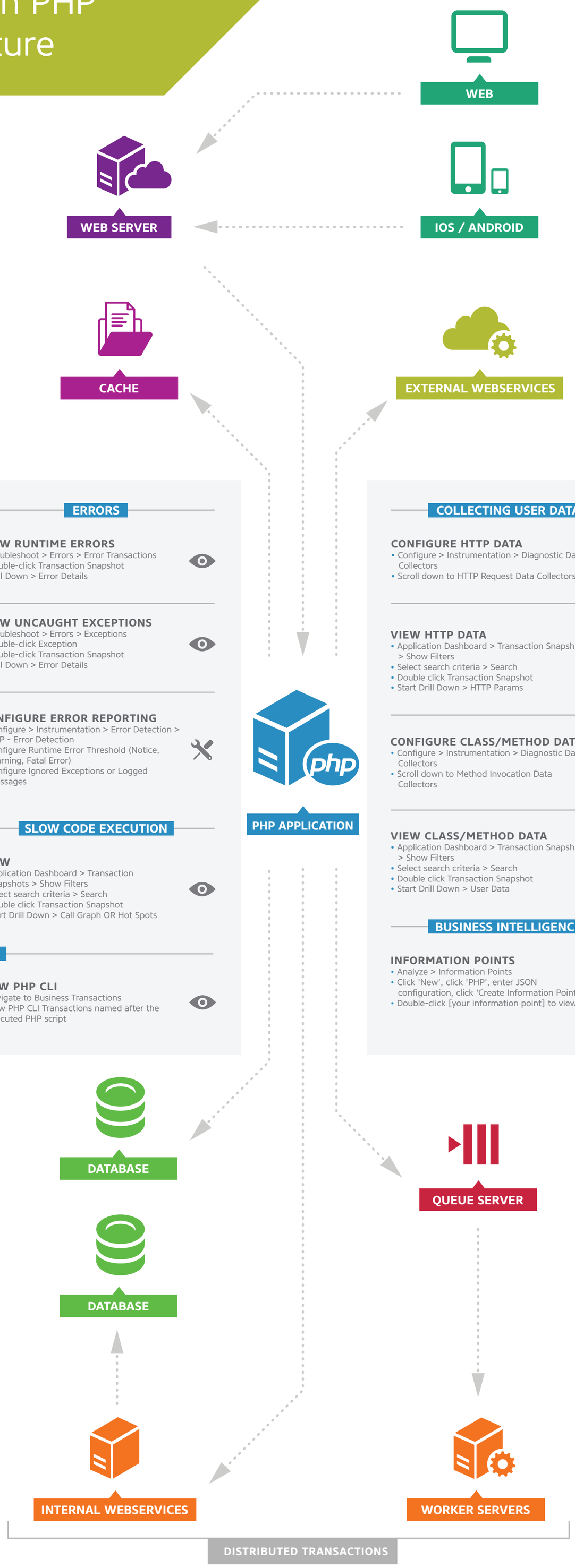
VIEW
- Navigate to Servers > Databases
- Double-click your DB
- Select your PHP Tier
- View slow queries

VIEW
- Application Dashboard > Transaction Snapshots > Show Filters
- Select search criteria > Search
- Double click Transaction Snapshot
- Start Drill Down > SQL Calls

VIEW
- Navigate to Application Dashboard > Flowmap
- Right-click on Database
- Select 'View in Database Monitoring'

INTERNAL WEBSERVICES

INFO
In a service-oriented environment the performance indicators of the distributed nature of the transaction is an integral aspect of characterizing transaction performance. AppDynamics applies distributed transaction tracing to for all business transactions as well as for the entire application. Using a tag, trace, and learn approach, AppDynamics traces the transaction context across all tiers, including JVMs, CLRs, PHP servers, and calls to HTTP, SOAP, databases, third party web services, etc.



END USER EXPERIENCE

SET HEALTH RULES
- Alert & Respond > Health Rules

CONFIGURE
- End User Experience > Web > Pages & AJAX Requests
- Double click on selected Page
- View Summary Timeline to locate bottleneck

VIEW
- End User Experience > Web > Analyze
- Focus on location, browser type, device type, and other combinations to analyze performance.

EXTERNAL WEBSERVICES

VIEW
- Servers > remote services
- Double-click remote service

VIEW
- Troubleshoot > Slow Response Times > Slowest DB & Remote Service Calls
- Select HTTP

PHP

COLLECTING USER DATA

CONFIGURE HTTP DATA
- Configure > Instrumentation > Diagnostic Data Collectors
- Scroll down to HTTP Request Data Collectors

VIEW HTTP DATA
- Application Dashboard > Transaction Snapshots > Show Filters
- Select search criteria > Search
- Double click Transaction Snapshot
- Start Drill Down > HTTP Params

CONFIGURE CLASS/METHOD DATA
- Configure > Instrumentation > Diagnostic Data Collectors
- Scroll down to Method Invocation Data Collectors

VIEW CLASS/METHOD DATA
- Application Dashboard > Transaction Snapshots > Show Filters
- Select search criteria > Search
- Double click Transaction Snapshot
- Start Drill Down > User Data

BUSINESS INTELLIGENCE

INFORMATION POINTS
- Analyze > Information Points
- Click 'New', click 'PHP', enter JSON configuration, click 'Create Information Point'
- Double-click [your information point] to view

ANALYSIS

VIEW APPDYNAMICS MACHINE AGENT
- Download & Install Machine Agent
- Navigate to Servers > App Servers > [Your PHP Tier] > [Your PHP Node]
- Select Hardware

VIEW HARDWARE
- Application Dashboard > Transaction Snapshots > Show Filters
- Select search criteria > Search
- Double click Transaction Snapshot
- Start Drill Down > Hardware

COMPARE RELEASES
- Analyze > Compare Releases
- Select time ranges to compare

HINT: Be sure to automatically add deployment events using our REST API (see Events).

CONFIGURE EVENTS
- Add APPLICATION_DEPLOYMENT or CUSTOM as an event type to add events using the AppDynamics REST API

VIEW EVENTS
- Navigate to Application Dashboard > Events

HINT: Add Custom events into all your automated scripts, including deployments, maintenance and rollbacks to keep track of differences in performance between key changes to your application and environment.

QUEUE SERVER

VIEW
- Navigate to your Application Dashboard > Flowmap
- Find Queue Server
- View latency to your queue server

VIEW
- Application Dashboards > Transaction Snapshots
- Find transactions that speak to your Queue server
- Double click > Start Drill Down > Call Graph
- Find method call that sends job, click to correlate to downstream worker server for associated call graph

WORKER SERVERS

INFO
When a PHP application communicates with an external component that is not being monitored as part of the same business application, such as a database or a message queue, you can monitor the performance data for the communication.

AppDynamics displays distributed communication performance in the business application and business transaction flow maps.

APPDYNAMICS