Getting Started with New Relic:
A Newbie’s Guide to Building Killer Apps with Great Performance
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**INTRODUCTION:**

Why hello there, newbie...

Congratulations! You’ve spent the last few minutes installing New Relic. And now you’re one step closer toward becoming one of the tens of thousands of developers who are expertly building, monitoring, and improving the health of their applications. Pretty exciting, isn’t it?

Before you dive right in, however, it’ll be helpful to take a few moments to understand the basic features of New Relic and exactly how they can help you. From Real User Monitoring and storage utilization to SQL queries and more, there’s an endless supply of valuable information that you can tap into, and rushing into things may mean you risk never finding out about New Relic’s full potential. Even if you’ve been using New Relic for a while, it’s worth your time, because it can never hurt to brush up on some essentials of application performance management (APM).

This eBook will act as your guide to everything you need to know about getting started with New Relic. Whether it’s teaching you how to dig into all those charts and tables to setting up alerts and performance thresholds, the following chapters will cover all the need-to-know features that’ll have you using New Relic like a pro in no time.

So what are you waiting for? Let’s get started.
CHAPTER ONE:

Application Monitoring Overview

Welcome to mission control

As soon as you login to your New Relic account, the first thing you’re going to see is the Application Monitoring Overview dashboard. This dashboard gives you the basic information about the selected app, including Apdex score, throughput (requests per minute), web transactions, error rate, recent events, and server information.

To view your app’s dashboard, go to the New Relic menu bar, select Applications > (your app’s name). The Application Monitoring Overview dashboard will automatically appear.

From here, you can drill down into a number of different areas, including:

- **Response Time**: Begin by selecting either the App Server Response Time or Browser Page Load Time using the drop down above the response time chart. Want to find out additional details about the patterns you’re seeing in the chart? Point, click, or drag anywhere on the chart and they’re yours.

- **Average**: New Relic captures all the requests that come in through your agent and displays the average response time to give you a general sense of your app’s performance. You can quickly identify any spikes in response time, and what the source of those spikes are, whether it’s in the code, the database, external calls, or elsewhere.
• **Histograms:** In addition to showing you the average response time of your app, you can also get a bigger picture view of its performance with histograms. With this feature, all of your app’s transactions are surfaced and plotted so that you can easily identify which ones are the most time consuming, and which ones are speeding past the rest.

• **Percentiles:** This feature allows you to view the response times of the 99th percentile and 95th percentile of your app’s transactions, alongside the median and average. Percentiles prevent you from relying only on the average response time of your app, and potentially ignoring transactions that slow your app down.

• **Selected Window of Time:** In the top right hand corner of New Relic, you will see the selected time window (in this case the last 30 minutes). Expand the menu to select the time period you wish to review.

• **Apdex Score:** Your Apdex score is a measure of how much slow site performance contributed to poor customer experiences in your app. To learn more about Apdex, go to Chapter 7.

• **Web Transactions:** This is where you’ll see the top five most time consuming (by default) web transactions, along with their average response time and throughput (requests per minute).

• **Error Rate:** This shows you the percentage of errors your app has encountered for a selected time period. To learn more about the Errors dashboard, go to Chapter 5.

• **Recent Events:** Problems and other events (such as deployments) appear in this list. Depending on how it’s performing, you’ll notice the associated app’s or server’s “traffic light” changing color between green, yellow, or red. To learn more about Recent Events, go to Chapter 7.

  **Servers:** Here’s where the status of your servers are located. This list will show you the Apdex score, response time, throughput, CPU usage, and memory of each of your monitored servers. To learn more about server monitoring, go to Chapter 6.

But that’s only the beginning! Now that you’re familiar with the Application Monitoring Overview screen, let’s move on to the good stuff: New Relic’s key features.
Real User Monitoring (RUM)

See what performance issues actual users are experiencing

One of the first New Relic features you'll want to get acquainted with is Real User Monitoring, also known as RUM. RUM provides valuable insight into the actual experience users have with your site. It gives you details like the time it takes for your users’ browsers to load your webpage, what browsers they’re using, and where they’re geographically located. So it’s no wonder RUM is one of the most popular features in New Relic.

There’s a major difference between New Relic Real User Monitoring and synthetic monitoring from other services like Keynote or Gomez. The data that New Relic collects is from actual users accessing your site—not from a robot or machine simply acting as a user. This is the real deal. And with that insight into exactly what users are experiencing, you can proactively pinpoint any problems that show up in RUM and nix them before the customer support calls start coming in.

New Relic collects real user data the same way Google Analytics works to track which websites you’ve visited. A small JavaScript snippet is placed in a user’s browser and it allows New Relic to start measuring key metrics from the moment an end user transaction or request is initiated to final loading of the resulting web page. The snippets activate a ping-back to New Relic servers after the pages finish loading.

So what kind of user data does RUM measure? For each end user page load, New Relic captures:

- Time spent in the frontend (browser)
- Time spent in the backend (network and web app)
- Geographic origin
- Browser type and version
- Operating system

The results are displayed in time spectrum charts, maps, and tables. You can view the data globally across all users, or see it sliced and diced by web page, browser or geography. Just think of all you can do with visibility into this data. Whether it’s a problematic browser or a slow script running in the backend, you’ll be able to spot any potential performance killers and quickly work to resolve the problems.

Ready to give RUM a try? Well, all it takes is a few clicks and you’ll be on your way.
To set up Real User Monitoring: From the New Relic menu bar, select **Applications > (selected app) > Settings > Application**, and select the checkbox option to enable RUM. You also have the option to customize the settings for Apdex (which measures your end users’ satisfaction with your app) and select up to five countries for additional color-coded monitoring on your New Relic Geography dashboard.

**VIEWING RUM DATA**

Once you’ve added RUM to an application, here’s how you can view the performance data:

- From the New Relic menu bar, select **Applications > (selected app) > Monitoring > Overview**.
- From the Overview dashboard, click **Browser**.
- From the **Browser page load time chart**, use standard New Relic dashboard functions to drill down into the details. For example, if you want to isolate RUM segments, click any of the chart legend’s names or colors.

You’ll see the Browser page load time chart displaying the average page load time in the following color-coded time segments:

- **Request queuing (BLACK)**: Wait time between the web server and the application code. Large numbers indicate a busy application server.
- **Web application (PURPLE)**: Time spent in the application code.
- **Network (BROWN)**: The network latency, or time it takes for a request to make a round trip over the Internet.
- **DOM processing (YELLOW)**: Time spent in the browser, parsing and interpreting the HTML. Measured by the browser’s DOMContentLoaded event.
- **Page rendering (BLUE)**: Time spent in the browser, displaying the HTML, running inline JavaScript, and loading images. Measured by the browser’s Load event.

With RUM, you now have a one-stop shop for performance evaluation. You can use New Relic’s actionable intelligence to gain a complete understanding of end user satisfaction and determine if application bottlenecks are in the frontend, network, application tier or connected backend systems. With all that insight, coming up with a solution will be a cinch.

But keep in mind: RUM is not the only thing you can monitor about your application’s performance. New Relic provides a variety of dashboards where you can view current and historical data by web transactions, geographical regions, database performance, external services, background tasks, architectural maps, browser types, and more!
CHAPTER THREE:

Transaction Traces
Dive into the details and troubleshoot those pesky bottlenecks

Sometimes you need the nitty-gritty transaction details to find out what exactly might be slowing your application down. The New Relic Transaction Traces feature does just that by arming you with pro-level diagnostics down to the SQL while replacing the time-consuming task of digging through log files. The result? Problems fixed fast.

In most instances, New Relic only collects streaming metric data. This data is aggregated, so that if the ORM Layer (such as ActiveRecord or Hibernate) were invoked 100 times during a 60-second time period, New Relic would collect one metric that was an aggregate of the 100 invocations.

However, with the Transaction Traces feature, just the opposite happens. Each minute, transaction tracing collects data for your slowest individual HTTP requests, giving you visibility all the way down to the SQL. If a transaction is taking longer than a configurable time period, New Relic captures the exact invocation pattern and details related to the invocation, such as the particular SQL statement that was issued. You can then view each segment of the trace as colored bars in the Transaction Trace Summary tab.

What’s particularly nice about New Relic’s Transaction Traces feature is its user-friendly interface. Unlike other APM solutions you may have used, the New Relic interface is super easy to navigate and find what you’re looking for.

If you want to give the feature a try, from the New Relic menu bar, go to Applications > (selected app) > Settings > Application. Once you’re at the overview dashboard, you can then do a number of things, which are outlined below.

VIEWING TRANSACTION TRACES

New Relic sorts transaction traces by response time so that the slowest appears first, but you can change the sorting options if you want. From New Relic’s Web Transactions dashboard, you can view trace details for the transactions that take longer than your defined threshold.

To see captured transaction traces for the time period indicated in the top right hand corner of your screen:

1. Go to the New Relic menu bar, select Applications > (selected app) > Monitoring > Web Transactions.
2. From the Web Transactions dashboard, click a link for any App Server Transaction Trace, or use the search window to locate and select a transaction trace.
VIEWING THE TRANSACTION TRACE SUMMARY

Once you’ve selected a specific application, you’ll first notice the Transaction Trace Summary tab. This nifty visual shows you color-coded segments of the transaction trace.

If you see red, there’s no need to panic — it’s not a clear-cut indication that there’s something wrong. Rather, it indicates that a significant amount of time was spent in that segment. You’ll be the one who determines what a ‘normal’ or ‘typical’ value for the process is when evaluating whether a red area on the bar chart actually indicates a problem.

- To view the percentage for any segment, hover over its colored bar on the chart.
- To view detailed information about any segment, click its name below the bar chart.
- To add a note, add a custom dashboard, or embed any segment, click the option below the bar chart.
- To view additional information about the transaction trace, select the Trace Details or SQL Statements tab (if available).

The Transaction Trace details tab shows the total duration in milliseconds and as a percentage of the trace. This duration includes the time consumed by all nested calls within the segment. The duration, bar graph, and percentage of each segment are color-coded according to the amount of time consumed by the segment minus time consumed in all nested calls.

You can see as much or as little detail from the transaction as you want. To control how much appears in the table, select Expand All or Collapse All. You can also expand or collapse individual rows as applicable.
VIEWING TRANSACTION TRACE DETAILS

Under the Duration column, you’ll notice colors indicating percentages of total trace time spent within the segment.

- **Red** means more than 25% of the total trace time was spent within the segment.
- **Yellow** means more than 5% of the total trace time was spent within the segment (excluding the duration of any nested segments).
- **Gray** indicates all other segments. A common problem when viewing transaction traces is deciding what is important and what is noise. New Relic makes smart guesses to make your job easier. When New Relic detects four or more consecutive segments that last 7.5ms or less, the segments are collapsed into a rollup node. To view the details under the Segment column, you can just expand the collapsed node.

When New Relic detects four or more consecutive identical calls, which is usually indicative of an N+1 problem, the segments are also collapsed into a rollup node. To view the first three calls in a sequence, again, expand the collapsed node.

Under the Drilldown column, you may see a number of different icons appear.

- For **SQL** statements, click the database icon to view the SQL query. Depending on your Transaction Trace settings, this query may show as raw or obfuscated SQL. If the total tie for the segment exceeds the Query plan threshold in your settings, the query analysis also will appear, along with a stack trace showing the exact location of the call in your code.
- If **background trace parameter details** are available, click the magnifying glass icon to view them.
- If **web transaction trace details** are available, click the app icon.
- If **cross application trace details** are available, click the trace waterfall icon to follow the trace details to another related application.

To view additional information about the transaction trace, select the Summary or SQL Statements tab (if available).
CHAPTER FOUR:

Key Transactions

Because not all transactions are created equal

Depending on the nature of your web application, some transactions may be more important to you than to others. If you're an e-commerce company, for example, you're likely interested in seeing transactions for signups or purchase confirmations. Alternately, if your biggest concern is around performance, then transactions from searches or logins will probably be most important to you.

New Relic's Key Transactions feature lets you closely monitor and report on your app's key transactions, including end user and app response time, call counts, and error rates. You can also set alert threshold levels for notifications when your key transactions are performing poorly (see Chapter 6).

There are two ways to create key transactions:

- If you are drilling down into an app and want to identify a key transaction immediately, your best bet is to select Applications > (selected app) > Monitoring > Web Transactions > (transaction name) > Track as Key Transaction.

- If you want to create several key transactions, or want to create key transactions from different apps, simply go to the Transactions menu.

**Tip:** If a key transaction has already been created, you can click Key Transactions to view the key transactions' Overview dashboard.
The first time you use the Key Transactions dashboard, a Welcome page will appear. After you create one or more key transactions, that dashboard will include a list of transactions for you to take a closer look.

**CREATING KEY TRANSACTIONS**

To create a key transaction from the menu bar, just follow these simple steps:

1. Go to the New Relic menu bar and select **Transactions**.
2. From the Transactions dashboard, click **Track a Key Transaction**.
3. To select the app from the key transaction, begin typing its name, and then select from the dropdown list.
4. Select your choice from the list of available transactions for the selected app.
5. Type in a name for the key transaction.
6. If the agent for the selected app supports custom alerting, use the default values that New Relic automatically fills, or set the Apdex and alert threshold values (see Chapter 7).
7. Click **Track Key Transactions** and voilà — you’re trackin’! You’ll receive alerts when the transaction deviates from its normal behavior.

The Key Transactions dashboard will immediately refresh and show the Overview dashboard for your new transaction.

**VIEWING KEY TRANSACTIONS**

Once you’ve created one or more key transactions, here’s how you can view them:

From the New Relic menu bar, select **Transactions**. Then click on the name of the transaction you want to drill down on for details.

The Transactions dashboard lists each key transaction by its customized name, and the associated app’s name appears below it. The dashboard also shows a list of recent events for all key transactions.

To view detailed information about a key transaction, click the key transaction’s name on the dashboard. The dashboard will immediately refresh to show the selected transaction’s Overview information.

The Key Transaction’s Overview dashboard functions like other New Relic dashboards. It shows you summary information about your key transactions in useful charts and tables. From here, you can drill down into specific details or select other tabs to view additional data.

**Tip:** To view an existing key transaction’s dashboard from the associated app’s dashboard, select **Applications > (selected app) > Monitoring > Web Transactions > (transaction name) > Key Transactions**.
SLA REPORTS FOR KEY TRANSACTIONS

Interested in getting daily or weekly service-level agreement (SLA) reports for your key transactions? No problem. You can view the information from the New Relic Transactions dashboard, or download it as a file with comma-separated values (CSV). The SLA reports include information about requests, response times, and end user satisfaction levels (a.k.a. Apdex values).

To view or download SLA reports for a key transaction: Go to the New Relic menu bar, select Transactions > (key transaction’s name) > SLA report. Then select the Daily or Weekly tab to view report data for that range. From there, you can:

- View a chart of any metric value (and create a note, custom dashboard, or a link you can embed for others to view) by clicking the metric’s name.
- View the report as comma-separated values by clicking Download this report as .csv.

ALERTS FOR KEY TRANSACTIONS

If the agent for your selected app supports custom alerting for key transactions, you can also define alert threshold levels as part of the initial setup. You can create custom alerts for Apdex T levels for your end users and browser, as well as caution levels (yellow) and critical alert levels (red) for error rates.
CHAPTER FIVE:

Traced Errors
A quick snapshot of all your errors in one place

If you’re looking for a quick and easy way to view all your error information, New Relic’s Traced Errors feature is the ticket. The Errors dashboard shows a chart with the error rate percentage for the selected time period, as well as a list of error messages. You can view and drill down details, use search and sort options, hide or delete the error, share it with others or file a ticket about it. To view, use search options, or delete errors, go to the New Relic menu bar, select Applications > (your application’s name) > Events > Errors. From here, you can use any of the available standard New Relic UI and dashboard drill-down functions.

VIEWING ERROR DETAILS
To view details about any error message on the Errors dashboard, click its Message link. From here, you can:

- Share the error message with others by email.
- File a ticket about it (using, for example, Lighthouse, Pivotal Tracker, JIRA).
- Delete or hide the error.
- Return to the Errors page.

Tip: The Errors chart also appears on the selected app’s Overview dashboard. If the chart shows errors, you can click its Error rate title to go directly to the Errors dashboard.
CHAPTER SIX:

Server Monitoring

View critical system metrics and keep capacity issues in check

In addition to a wide range of application performance monitoring tools, New Relic also has a Server Monitoring feature that lets you see which servers have capacity issues and immediately take corrective action. After all, how can you know the application is healthy if you can’t see the server it’s running on? Specifically, New Relic Server Monitoring allows you to view and analyze critical system metrics, including CPU usage, physical memory, network activity, processes, and disk I/O utilization and capacity.

To start viewing details about your servers’ health and recent server events, install the New Relic Server Monitoring Agent for your server. Once complete, go to the New Relic menu bar and select Servers. The Servers dashboard lists all of your servers reporting to New Relic’s collector, including the server host names, current CPU, memory, and disk usage. You’ll notice a color-coded ‘traffic light’ indicating each server’s current health.

UNDERSTANDING TRAFFIC LIGHTS

- **Green**: The server is A-OK.
- **Yellow**: A warning that the server is experiencing some non-critical issues.
- **Red**: A critical alert that something is wrong with the server, or that the New Relic agent on this server is unable to communicate with the collector.
- **Gray**: No data is being reported for the server.

From here, you can do a number of things to tailor your view of the Servers user interface (UI). Similar functions also are available with your Applications user interface.

**Which operating systems does Server Monitoring support?**

- Linux
- SmartOS
- Windows 8
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<th>If you want to...</th>
<th>Do this...</th>
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<tr>
<td>Change the order that servers appear on the list</td>
<td>Click any column heading to sort in ascending or descending order.</td>
</tr>
<tr>
<td>Add a server to the dashboard</td>
<td>Click <strong>Add More</strong> and then follow the installation instructions for your specific platform.</td>
</tr>
<tr>
<td>Delete a server from the dashboard</td>
<td>To delete a server completely, make sure its ‘traffic light’ is gray. Then click <strong>Delete</strong>. If you want to remove it from the list without deleting it completely, use the filter or search options.</td>
</tr>
<tr>
<td>Filter the list of servers</td>
<td>To filter or search by server name, app name or tags, select the filter option. Or to search by host name, type the name in the search window.</td>
</tr>
<tr>
<td>Filter the list of recent events</td>
<td>Click the icon for specific types of events: notifications, critical alerts, warnings, deployments or All.</td>
</tr>
<tr>
<td>Set up an RSS feed for server events</td>
<td>On the Recent Server Events section of the dashboard, click the orange RSS icon.</td>
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<tr>
<td>View details about a server’s health</td>
<td>Click the server’s name to go to the Server Overview dashboard. Or, click the CPU, Disk IO, Memory or Fullest Disk field for a specific server to see details about that specific metric for a server. For example, clicking the CPU field for a server will take you to the list of processes running on that server, sorted by CPU usage.</td>
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<tr>
<td>View details about an event</td>
<td>Click the corresponding link for the event.</td>
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<td>Define the alert thresholds for one or more servers</td>
<td>Click the gear icon and use the Threshold Settings popup to type in the yellow (caution) and red (critical) values.</td>
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<tr>
<td>Identify who receives alert notifications about one or more servers</td>
<td>Click the gear icon and then click <strong>Configure Server Alerts</strong>.</td>
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</table>
See a server that's not green and want to find out what's going on? To view summary and detail information about a specific server, select the server you want to check out from the Servers list. By default, the server’s Overview page will appear.

**SERVER OVERVIEW**

The Server Overview dashboard shows summary information about a specific server for a selected time period, including:

- Charts with CPU usage information, load averages, physical memory, disk utilization and network I/O. (Tip: Each chart includes standard New Relic features to drilldown details, add a note, add to a customer dashboard or embed the chart’s URL into an iFrame.)

- Information about the operating system and architecture, including the number of CPUs and the amount of RAM installed on the host.

- A list of applications being monitored by your New Relic account, including their current health. (Tip: For additional details, point to the app’s ‘traffic light’ or click on the app’s name.)

- A sortable list of running processes, including the name, user, count, and CPU and memory usage.

- A list of recent events for the server.

**SERVER PROCESSES**

If you want to check out all the processes running a specific server, go to Servers > (selected server), then select Processes. From the selected server’s Processes dashboard, you can:

- View the list of processes as a graph (default) or table.

- Sort the list of processes by memory or CPU usage.

- View a chart of the top five memory consumers and a chart of the top five CPU consumers for the server. (Tip: Similar to what you can do in the Server Overview page, each chart includes standard New Relic features to drilldown details, add a note, add to a custom dashboard or embed the chart’s URL into an iFrame. Point to or click any process for additional details, including memory and CPU statistics over time. For example, the Running Instance Count shows how many instances of the process were running at the selected point in time.

- Change the time period for the data.

**Tip:** To change the time period for data that appears on the server charts, use the time picker. This will also change the time period for viewing app servers and browser data. Located on the top right-hand corner just below the Help and Logout, the time picker defaults to the Last 30 minutes.
NETWORK PERFORMANCE

Curious to see what’s going on in a specific server’s network? You can view a list of network interfaces and an indication of network transmit/receive throughput by going to Servers > (selected server) > Network.

From here, you can select a network interface from the list to view details about Bandwidth (Kb/s), Packets per Second or Errors Per Second over time. You can also point to, click or drag anywhere on the charts for additional details.

DISK PERFORMANCE AND UTILIZATION

The Server UI also lets you view information about I/O utilization. To view these details, go to Servers > (selected server), then select Disks.

The Disks dashboard shows a list of disks along with an indication of how much space is in use on the disk, and how much I/O utilization is taking place. Click any disk on the list to view a detailed breakdown of I/O Utilization, I/O Rate (MB/s), I/O Operations per Second, and Space Usage over time. For example, the Space Usage indicates how much space might be in use seven days from now, and an estimate of when the disk might reach capacity.

As outlined above, there’s a lot you can do with the Server Monitoring feature. And getting a glimpse into your server health is just as important as viewing the application — because the greater visibility you have, the greater ability you have to stop any potential issues from escalating.

Just remember that, in order to use the New Relic Server Monitoring, you’ll need to meet specific compatibility rules and requirements.
CHAPTER SEVEN:

Apdex and Alert Policies
Making sure you’re always in the know

Sometimes it’s difficult to stay on top of every transaction and traced error. That’s why New Relic makes it easy by giving you the ability to set thresholds for alerts on several metrics, including:

- Your application’s error rate and Apdex score
- Server CPU, disk, and memory
- Key transactions’ customized error rates and Apdex scores

These metrics are evaluated in real time using a recent time window and moving average. When a monitored metric crosses a threshold for an extended period, this triggers a problem event and corresponding alert notifications.

New Relic supports alerting on Apdex scores and your server’s CPU, disk, and memory.

ALERT DETAILS AND RESPONSES

When an event triggers an alert, the alert summary information automatically pops up on your New Relic dashboard’s Recent Events list. For details about the alert, including history and charts, click the alert’s corresponding link. From the details page, you can also acknowledge that you received the alert notification.

So what exactly happens when an Apdex or Error Rate problem triggers an alert? First, New Relic will send you an initial notification, and you will see an icon on your Recent Events list for the type of event. If availability monitoring detects a site outage while the alert is still open, it escalates the problem to a Downtime alert and sends another notification. When all Critical or Downtime problems are resolved, New Relic sends one final, closing notification to indicate that you’re back on track, and an envelope icon appears on your Applications Overview Recent Events list. You can click it to view details of the entire event from start to finish.

Tip: To filter the Recent Events list to a specific type of event, click the corresponding icon. You can also view dashboard details about alerts, errors, and deployments by selecting Applications > (selected app) > Events or by selecting Tools > Alerts.

WHAT’S AN APDEX SCORE?

Apdex is an industry standard to measure users’ satisfaction with the response time of an application or service. It’s a simplified SLA solution that gives application owners better insight into how satisfied users are, in contrast to traditional metrics like average response time, which can be skewed by a few very long responses.
DON’T WORRY: NO ‘FLAPPING’ HERE

Just because a threshold is crossed, that doesn’t mean New Relic will immediately start sending you a flurry of notifications. For example, if your Apdex score goes below your Critical threshold, New Relic won’t immediately turn on your app’s red traffic light or send an alert. This helps avoid excessive notifications and ‘flapping’ of alerts. Depending on the alert type, it usually takes a couple minutes before New Relic determines the problem is not just a temporary spike and changes the traffic light to red.

If you’d like to send an email to your team letting them know you’ve acknowledged an event, you can go to the alert’s detail page and click Acknowledge alert. New Relic automatically records your name in the alert.

Tip: The benefit of Apdex in practice is that it highlights discrepancies in response time that are otherwise hidden by an average. So if you set your Apdex goal to match your average response time, you’ll get a lot more value out of it. But just remember: As the performance of your application improves, be sure to lower your Apdex score so it stays relevant.
**ALERT NOTIFICATIONS**

New Relic automatically sends alerts for application availability monitoring (regardless of whether the app is active) and server monitoring (as long as the server is online when the condition occurs). New Relic does not automatically send Critical alerts (Apdex, error thresholds, etc.) for low-traffic applications. An app has to have at least an average of 5 requests per minute for more than 3 minutes before New Relic sends Critical threshold alerts.

In addition to alert notification messages, you’ll also see weekly performance summaries about your application sent to your account email address. You can also have alert notifications for applications (including key transactions) and servers sent to your PagerDuty, Campfire, HipChat, Webhook, or any other external email accounts (including those used on your mobile device).

If you want to limit the types of messages that New Relic automatically sends you, you can manually adjust the settings. For example, if you only want to receive alerts for downtime, simply change the “My preferences” settings in New Relic’s user interface.
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**TUTORIAL**

**ALERT POLICIES**

If you have multiple applications that require the same alerting threshold, you can easily create and set an alert policy across a group of apps in one simple step. As long as you’re an account Admin, you can enable or disable alerts for an application, or key transaction and server monitoring as well. Here’s how: Go to the New Relic menu bar, select Tools > Alert policies.

From here, you’ll first want to create a notification group (or groups) indicating who the alerts will be sent to. Go to the Notification channels tab and click on the Create group or channel button. From the drop-down menu, select Group, and enter a name for your notification group (e.g. “DevOps”). Once you click Manage Channels, you’ll also have the option to indicate which channels your alert notifications will be sent through. Options include email, HipChat, Campfire, PagerDuty, and Webhooks.

With a notification group set up, you’re now ready to set alerts based on application policies, key transaction policies, or server policies. Say you want to create an application policy:

1. Select the appropriate tab, and click on the Create application policy button. Give the application policy a name (e.g. “Production Apps”) and then hit Create. Now you have the ability to set the Apdex score, set the error rate (both critical and cautionary), and select whether or not you want to be alerted when an app is unresponsive.

2. On the right-hand side of the screen is where you can choose which applications you want assigned to this policy. Check all the appropriate boxes, and click Assign now.

3. The final step is to select which notification channels the alerts will go to. Click on the Manage policy channels button, select the notification group(s) you want it to be sent to, and you are good to go!

After the application policy is enabled, you can also identify external email addresses that will receive alert notifications. With New Relic’s alerting capabilities, you and your extended team will never be left in the dark.
You’ve just completed a crash course in New Relic 101. Now that you’ve familiarized yourself with the basic features of New Relic, you’re ready to start using the software to its full potential.

As a newbie-no-longer, go forth and start reaping more value out of New Relic. With the more information you pull from your app, the faster you can solve performance issues and keep your end users happy. Plus, the less time you spend troubleshooting means the more time you can spend creating an even greater app.

This eBook intends to give you an introductory understanding of the need-to-know features in New Relic. If you find yourself wanting to learn more about additional New Relic capabilities, visit: [www.newrelic.com/docs](http://www.newrelic.com/docs).

**CONCLUSION:**

And there you have it!