Dramatically improve service availability

Prioritize issues and prevent problems with consolidated event monitoring and service automation
Imagine a highly available business services environment

People can access the services they need when they need them. Unplanned downtime is rare. When it does occur, it’s rapidly resolved. And downtime-related losses are minimized.

Highly available business services rely on modern IT operations management (ITOM). What does that look like? You have an availability dashboard structured around business services. You also have consolidated event monitoring, so you can quickly identify the most serious issues that may impact service performance before they turn into outages. These high-priority issues are then automatically routed and assigned to the right person. Plus, you capture everything you learn in a knowledge base that your whole team can share.

Sound like something from a perfect world? For a growing number of IT organizations, it’s the real world. New ITOM best practices pioneered by ServiceNow customers have been proven to increase service availability. And implementing them may be easier and less time-consuming than you think. By developing a service availability strategy, you can address IT issues before they become business problems.

This ebook can help you identify where availability challenges exist and improve your ability to analyze, prevent, and address problems before they occur.
Are you at risk for downtime?

Are you at risk for failing to prevent a business service problem and/or not resolving one fast enough? To find out, ask yourself the following questions:

- Is it difficult to identify, classify, and prioritize incidents due to the volume or complexity of alerts?
- Do you believe your current service maps are always up to date?
- Do you find actively managing your data centers to improve business services too challenging?
- Are you spending too much time and money on manual service management?
- Would understanding the cost of downtime associated with different business services help prioritize remediation efforts?

Every "yes" answer represents an opportunity to improve service availability.
Establish a framework for higher service availability

If you have availability challenges, you need to establish a service availability framework. The most successful ones include:

- **Consolidated event monitoring** to reduce event noise, understand issues, and use service maps to pinpoint root causes

- **Automated service management** to rapidly assign priority incidents to the right team members

- **An availability dashboard** with early issue warnings for critical business services

- **A knowledge base** that captures insights and remediation information from critical alerts and incidents
Best practices for improving service availability

ServiceNow helps more than 940 customers across 11 verticals manage business critical services. The best practices in this section are based on our real-world experience helping our customers improve service availability.

Consolidate event data and map it to business services

Many, if not most, IT organizations use multiple monitoring tools in their data center to continuously monitor the quality of their services and IT infrastructure. Unfortunately, most of these monitoring tools work in silos, and may automatically send an email to someone on the IT team when an event occurs, regardless of its importance. Even at a medium-sized data center, these tools can easily generate hundreds of messages a day, creating a backlog of events that become unmanageable.

IT staff are left to contend with many one-off events, and critical issues can get lost in the flood of data. As businesses scale, event notifications continue to multiply, making troubleshooting even more difficult. That’s why we recommend you consolidate and filter all event-related data and associate them with your business services in order of priority.
Identify the critical events

To do this, you’ll need a fully populated Configuration Management Database (CMDB) with well-defined configuration items (CIs)*. We suggest this step-by-step approach:

1. Bring all events into a single metadata repository
2. Filter events to minimize noise and clarify priorities
3. Correlate and map the alerts to CI records and associated business services
4. Close the loop once the alerts are mapped to business services: automatically create incident records, update change records, update third-party monitoring tools, and lay the groundwork for remediation to be automated

At the end of this process, you should have a consistent, automated way of managing thousands of raw events each day and reducing them to a smaller number of high-priority, actionable incidents. Focusing on high-priority IT issues can dramatically improve availability. It can also reduce costs associated with downtime.

*For a more detailed explanation on best practices for CMDBs, read our eBook on Service Visibility.
Assign resources quickly

Some IT teams rely on email to assign resources for all events. Others may use email to manage events that fall outside pre-defined workflows, such as security incidents or issues that are assigned to staff outside the IT department, such as facilities managers. Either way, a new event can trigger multiple email chains and hand-offs that make resolving issues more difficult, increase the risk of downtime, and may even lead to larger events.

We recommend choosing a flexible service management solution that allows you to quickly modify pre-defined workflows and connect with non-IT systems. We also suggest building relationships with non-IT teams you may need to rely on to address issues, and periodically auditing your pre-defined workflows to make sure they are accurate and up to date.

Adopting these practices can help you quickly assign each critical incident to the right department. And the faster you can assign someone who has the right training, the faster it will be remediated.
Leverage an integrated services dashboard

An integrated services dashboard should allow you to see the status of business services and the IT services that support them. It should call out high-priority events that are likely to impact business services in the near-term, and let you drill down to the relevant CIs. It should also provide pre-warnings of slowdowns or minor events that aren’t causing problems now, but could in the future.

With an integrated services dashboard, you can see existing problems that are causing outages and potential problems before they cause service downtime. For example, if twenty servers are having performance issues, your dashboard can instantly identify which ones could, in the event of an outage, shut down business services.
Create a knowledge base and use it

A solid knowledge base, organized by the CIs defined in your CMDB, can help your IT team address problems faster and more effectively. Building a knowledge base requires defining a hierarchy of information. It should include top-level categories, such as CIs, as well as more granular topics to allow for effective filtering and search. Your knowledge base should also be tightly integrated with your service management system, so staff can document information on incidents and fixes without much effort.

With a well-designed knowledge base, your IT staff can quickly look up information directly relevant to a particular CI whenever it generates an event. For example, if the service dashboard indicates a particular network router is slowing down a network that business services depend on, use your knowledge base to quickly check for past issues with that router, and how they were fixed.
Track these important KPIs

We recommend establishing key performance indicators (KPIs) to measure the success of your service availability program. KPIs our customers often track are:

• **Mean time to recovery (MTTR) and service outage trends**, including frequency and duration

• **Availability changes after adopting event prevention strategies**, like addressing early warnings or modeling changes before they are made

• **Operating expense (OpEx) reductions** from automated remediation and efficiencies in service delivery
Customer snapshot: Zillow

Consolidated event management delivers higher service availability

Headquarters: Seattle, WA

Highlight: ServiceNow provides a consistent, automated way of managing thousands of raw events each day and reduces them to a small number of actionable incidents.

Challenges
• Manual email-based approach to event management
• No simple way of linking appropriate knowledge articles to specific events

Results
• ServiceNow reduces thousands of events to a few dozen actionable incidents
• Ability to attach relevant knowledge base articles to each incident with the push of a button
• Events link to corresponding CIs in the CMDB to instantly identify affected devices and services

Read: the full case study.

“By consolidating our monitoring and managing our events consistently, ServiceNow Event Management gives us the ability and confidence to take on new challenges.”

— Seth Thomas, Director, Site Operations
Developing your ITOM maturity

Availability is the second phase of your journey toward a successful ITOM function that supports better business outcomes. Availability is a natural extension of service visibility. Once you’ve achieved service availability, you have a strong foundation for improved governance and flexible self-service options, including managing cloud resources, during the agility phase.

Service Operations Maturity Model

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visibility</td>
<td>Availability</td>
<td>Agility</td>
</tr>
<tr>
<td>Establish a single system of record for IT</td>
<td>Enable service-centric operations management</td>
<td>Improve governance, remediation, self-service</td>
</tr>
</tbody>
</table>

Static/Reactive → Service-Awareness
Learn more

Are you ready to transform ITOM?
Visit our ITOM resources page at: