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AT&T Application Resource Optimizer

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Suggested Best Practices for File Download

Text File Compression	Provides background on the different methods for text file compression, looks at the issue of when it is most beneficial to use compressions, and provides a recommendation for using text file compression to make your app pages render faster.	View
Duplicate Content	Looks at how content becomes duplicated, how that effects an application, and offers recommendations for developing a caching strategy to reduce duplicate content.	View
Cache Control	Describes the caching mechanisms and Cache-Control directives that are specified in the HTTP/1.1 Protocol, discusses why caching is important, and provides recommendations for implementing a cache in an application.	View
Cache Expiration	Describes the components of the expiration model that are specified in the HTTP 1.1 Protocol, gives an example of what can occur when the expiration model is not used correctly, and provides recommendations for how to take advantage of the cache expiration mechanism in an application.	View
Content Pre-fetching	Looks at how pre-fetching works, describes some issues involved in content management, and provides recommendations for how to use pre-fetching in an application.	View
Combine JavaScript and CSS Requests	Explains how combining the requests for files of the same type can speed up the loading of your app.	View
Resize Images for Mobile	Describes the pros and cons of different approaches for sizing and displaying images, and provides recommendations for determining which images are causing inefficiency and how they can be resized for mobile devices.	View
Minify CSS, JS, and HTML	Describes some issues involved with removing unnecessary characters from text files, tells you how AT&T ARO can help identify files that could be minified, and provides recommendations for minifying your CSS, JS, and HTML files.	View
Managing Images with CSS Sprites	Looks at CSS sprites as a way to speed up web connections in your app by reducing the number of image requests.	View

Suggested Best Practices for Connections

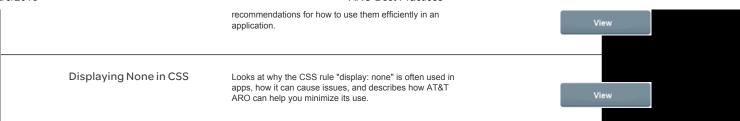|		
Opening Connections	Describes the impact that opening connections inefficiently can have on a wireless application and offers recommendations on how to open connections more efficiently.	View

Multiple Simultaneous TCP Connections	Takes a look at how TCP connections are established to see why persistent connections are more efficient, examines the issue of latency when multiple persistent connections are opened on a wireless network, and offers recommendations for smarter connection management in mobile apps to deal with this issue.	View
Periodic Transfers	Explains how periodic transfers can cause an application to drain energy and offers recommendations on how to use periodic transfers effectively so that they have the least effect on user experience and network resources.	View
Screen Rotations	Looks at how accelerometers are used in mobile apps, describes the issues involved in managing screen rotation, and provides a recommendation for how to manage screen rotation more efficiently.	View
Closing Connections	Describes the ways in which TCP connections can be closed, examines an issue that occurs when TCP connections are not deliberately closed, and offers recommendations for closing connections more efficiently.	View
Offloading to Wi-Fi	Discusses the costs and benefits of using Wi-Fi in an application.	View
Third-Party Scripts	Looks at the issues involved with using third-party scripts and provides recommendations for reducing the impact of third-party scripts on an app.	View

Suggested Best Practices for HTML

HTTP 400 and 500 Status Codes	Provides some background on what the different classes of HTTP Status Codes represent, describes the issues raised by the most common 400 and 500 Status Codes, and discusses possible resolutions for them.	View
HTTP 300 Status Codes	Provides some background on what the different classes of HTTP Status Codes represent, describes the issues raised by the most common 300 Status Codes, and discusses possible resolutions for them.	View
Asynchronous Load of JavaScript	Describes how you can speed up the rendering of pages in your app by downloading JavaScript files asynchronously.	View
HTTP 1.0 Usage	Describes the improvements that were added in the HTTP 1.1 protocol and discusses the issues faced by apps that use the older protocol HTTP 1.0.	View
File Order of External Style Sheets and Scripts	Looks at different types of peripheral applications and the issues involved in using them, and provides recommendations for how to use them efficiently in an application.	View
Empty Source and Link Attributes	Describes how leaving source or link attributes empty can cause extra overhead and delays in your app, and tells you how AT&T ARO can help identify files that contain empty attributes so you can mitigate the issue.	View
Flash Files	Looks at different types of peripheral applications and the issues involved in using them, and provides	

recommendations for how to use them efficiently in an
application.

Displaying None in CSS	Looks at why the CSS rule "display: none" is often used in apps, how it can cause issues, and describes how AT&T ARO can help you minimize its use.	View

Other Suggested Best Practices

Accessing Peripherals	Looks at different types of peripheral applications and the issues involved in using them, and provides recommendations for how to use them efficiently in an application.	View

General Topics

Image File Compression	Discusses image resolution and compression, describes the issues involved with managing image sizes, and provides recommendations for reducing the file size of images to provide the best quality images for the lowest overhead on a wireless network.	View
Comparing LTE and 3G Energy Consumption	Describes the differences in the state machines and power usage of the LTE and 3G networks, and shows you how AT&T ARO displays those differences so you can be aware of how your app is performing on both networks.	View
Content Optimization for Mobile Devices	Content design and management for mobile devices has long been a challenge due to screen size and network speeds. Even as devices and networks have made amazing improvements, developers still need to carefully manage their content and look for ways to optimize it.	View

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SDKs, Plugins, & More
Success Stories
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ADDITIONAL RESOURCES

Technical Library
Device References and Specs

SUPPORT

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Live Chat
Submit a Ticket
FAQs

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GitHub

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