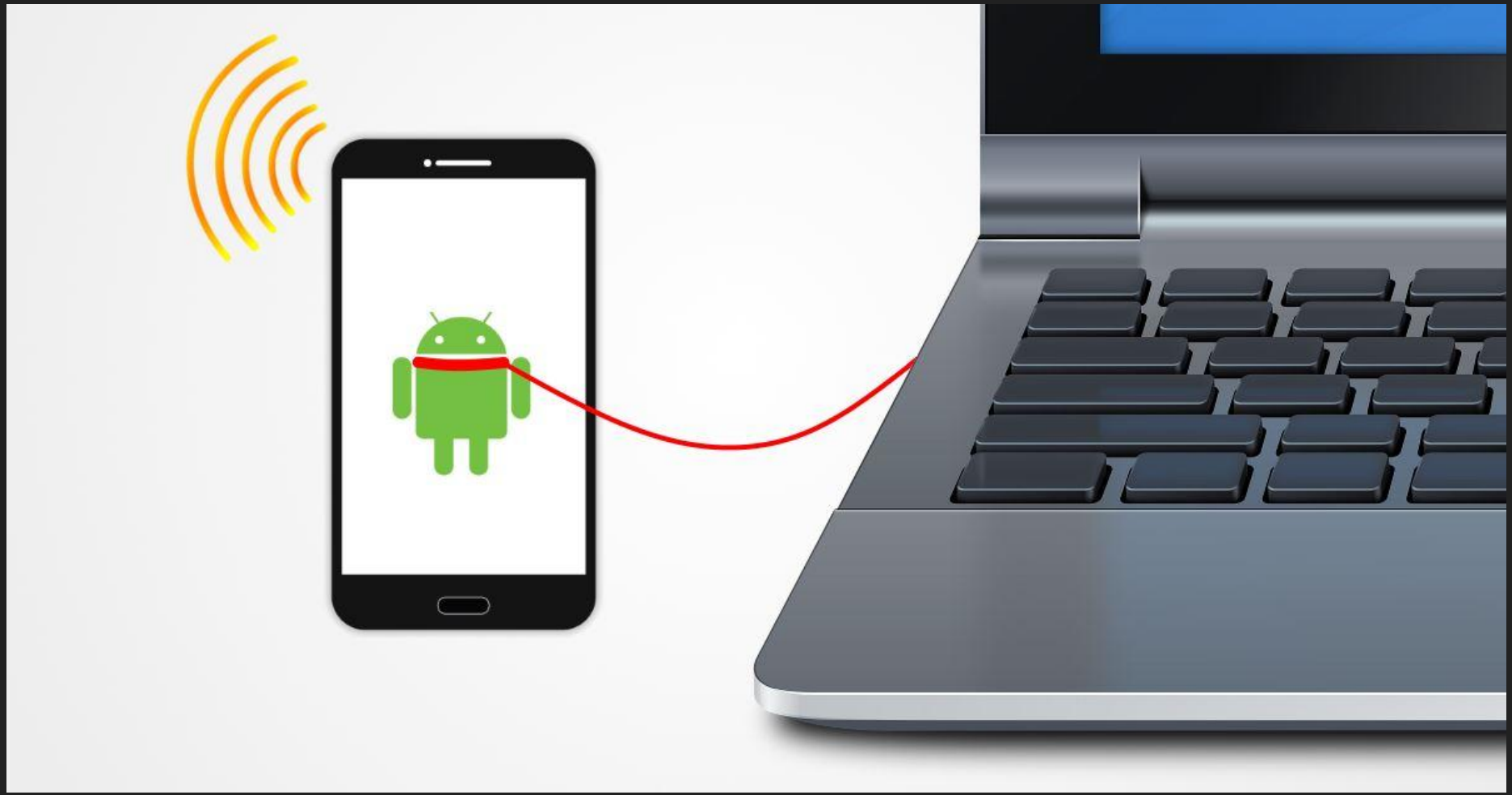
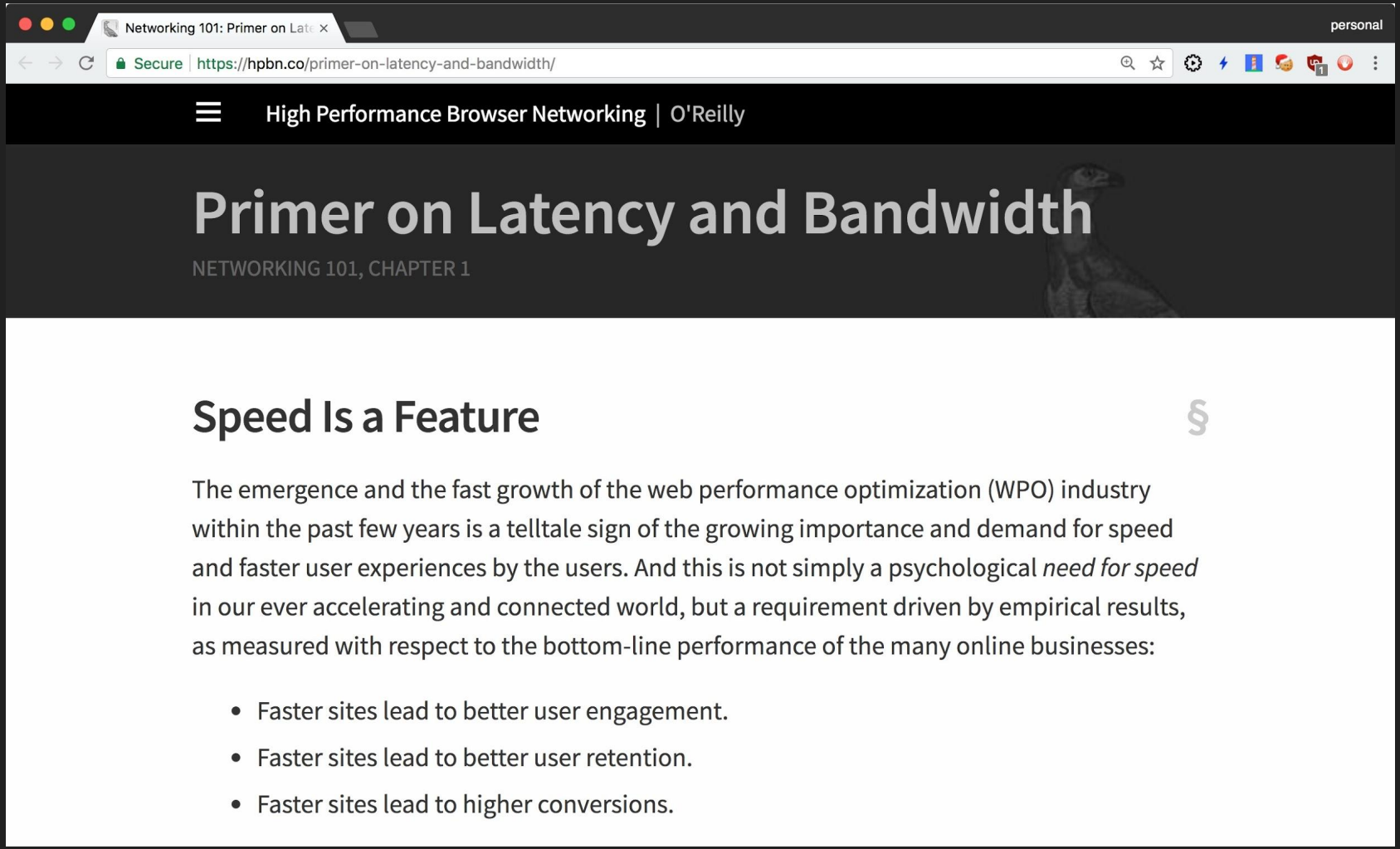
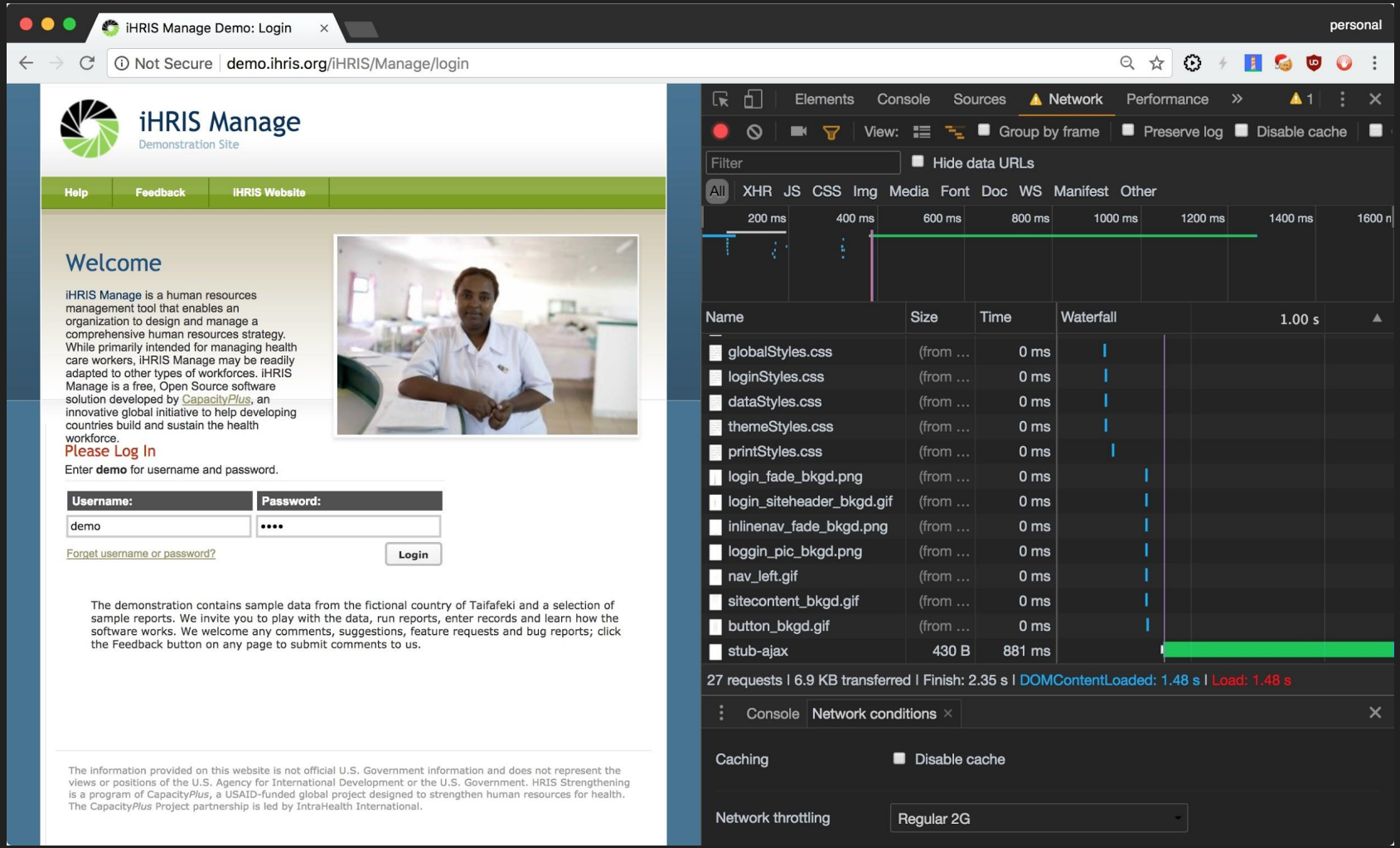
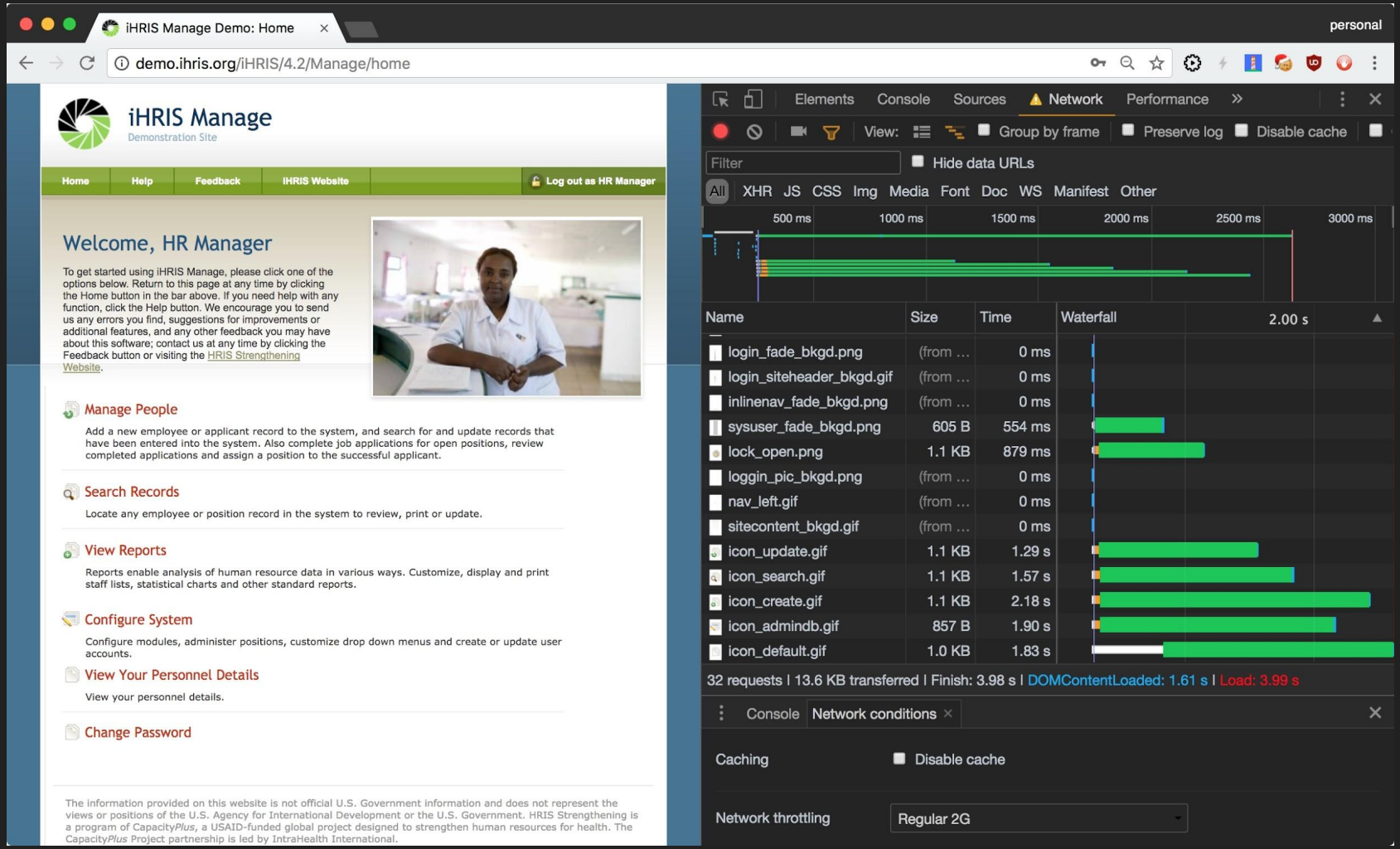
# How to Have Happier Users and Better Data with Faster Apps

@datarichness




Networking 101: Primer on Late
personal
Secure
https://hpbn.co/primer-on-latency-and-bandwidth/
High Performance Browser Networking | O'Reilly
Primer on Latency and Bandwidth
NETWORKING 101, CHAPTER 1
Speed Is a Feature
§
The emergence and the fast growth of the web performance optimization (WPO) industry within the past few years is a telltale sign of the growing importance and demand for speed and faster user experiences by the users. And this is not simply a psychological *need for speed* in our ever accelerating and connected world, but a requirement driven by empirical results, as measured with respect to the bottom-line performance of the many online businesses:
- Faster sites lead to better user engagement.
- Faster sites lead to better user retention.
- Faster sites lead to higher conversions.


iHRIS Manage Demo: Login
personal
Not Secure
demo.ihris.org/iHRIS/Manage/login
iHRIS Manage
Demonstration Site
Help
Feedback
iHRIS Website
Welcome
iHRIS Manage is a human resources management tool that enables an organization to design and manage a comprehensive human resources strategy. While primarily intended for managing health care workers, iHRIS Manage may be readily adapted to other types of workforces. iHRIS Manage is a free, Open Source software solution developed by CapacityPlus, an innovative global initiative to help developing countries build and sustain the health workforce.
Please Log In
Enter demo for username and password.
Username:
Password:
demo
Forget username or password?
Login
The demonstration contains sample data from the fictional country of Taifafeki and a selection of sample reports. We invite you to play with the data, run reports, enter records and learn how the software works. We welcome any comments, suggestions, feature requests and bug reports; click the Feedback button on any page to submit comments to us.
The information provided on this website is not official U.S. Government information and does not represent the views or positions of the U.S. Agency for International Development or the U.S. Government. HRIS Strengthening is a program of CapacityPlus, a USAID-funded global project designed to strengthen human resources for health. The CapacityPlus Project partnership is led by IntraHealth International.
Elements
Console
Sources
Network
Performance
View:
Group by frame
Preserve log
Disable cache
Filter
Hide data URLs
All
XHR
JS
CSS
Img
Media
Font
Doc
WS
Manifest
Other
200 ms
400 ms
600 ms
800 ms
1000 ms
1200 ms
1400 ms
Name
Size
Time
Waterfall
1.00 s
globalStyles.css (from … 0 ms
loginStyles.css (from … 0 ms
dataStyles.css (from … 0 ms
themeStyles.css (from … 0 ms
printStyles.css (from … 0 ms
login_fade_bkgd.png (from … 0 ms
login_siteheader_bkgd.gif (from … 0 ms
inlinenav_fade_bkgd.png (from … 0 ms
loggin_pic_bkgd.png (from … 0 ms
nav_left.gif (from … 0 ms
sitecontent_bkgd.gif (from … 0 ms
button_bkgd.gif (from … 0 ms
stub-ajax 430 B 881 ms
27 requests | 6.9 KB transferred | Finish: 2.35 s | DOMContentLoaded: 1.48 s | Load: 1.48 s
Console
Network conditions
Caching
Disable cache
Network throttling
Regular 2G


iHRIS Manage Demo: Home
personal
demo.ihris.org/iHRIS/4.2/Manage/home
iHRIS Manage
Demonstration Site
Home
Help
Feedback
iHRIS Website
Log out as HR Manager
Welcome, HR Manager
To get started using iHRIS Manage, please click one of the options below. Return to this page at any time by clicking the Home button in the bar above. If you need help with any function, click the Help button. We encourage you to send us any errors you find, suggestions for improvements or additional features, and any other feedback you may have about this software; contact us at any time by clicking the Feedback button or visiting the HRIS Strengthening Website.
Manage People
Add a new employee or applicant record to the system, and search for and update records that have been entered into the system. Also complete job applications for open positions, review completed applications and assign a position to the successful applicant.
Search Records
Locate any employee or position record in the system to review, print or update.
View Reports
Reports enable analysis of human resource data in various ways. Customize, display and print staff lists, statistical charts and other standard reports.
Configure System
Configure modules, administer positions, customize drop down menus and create or update user accounts.
View Your Personnel Details
View your personnel details.
Change Password
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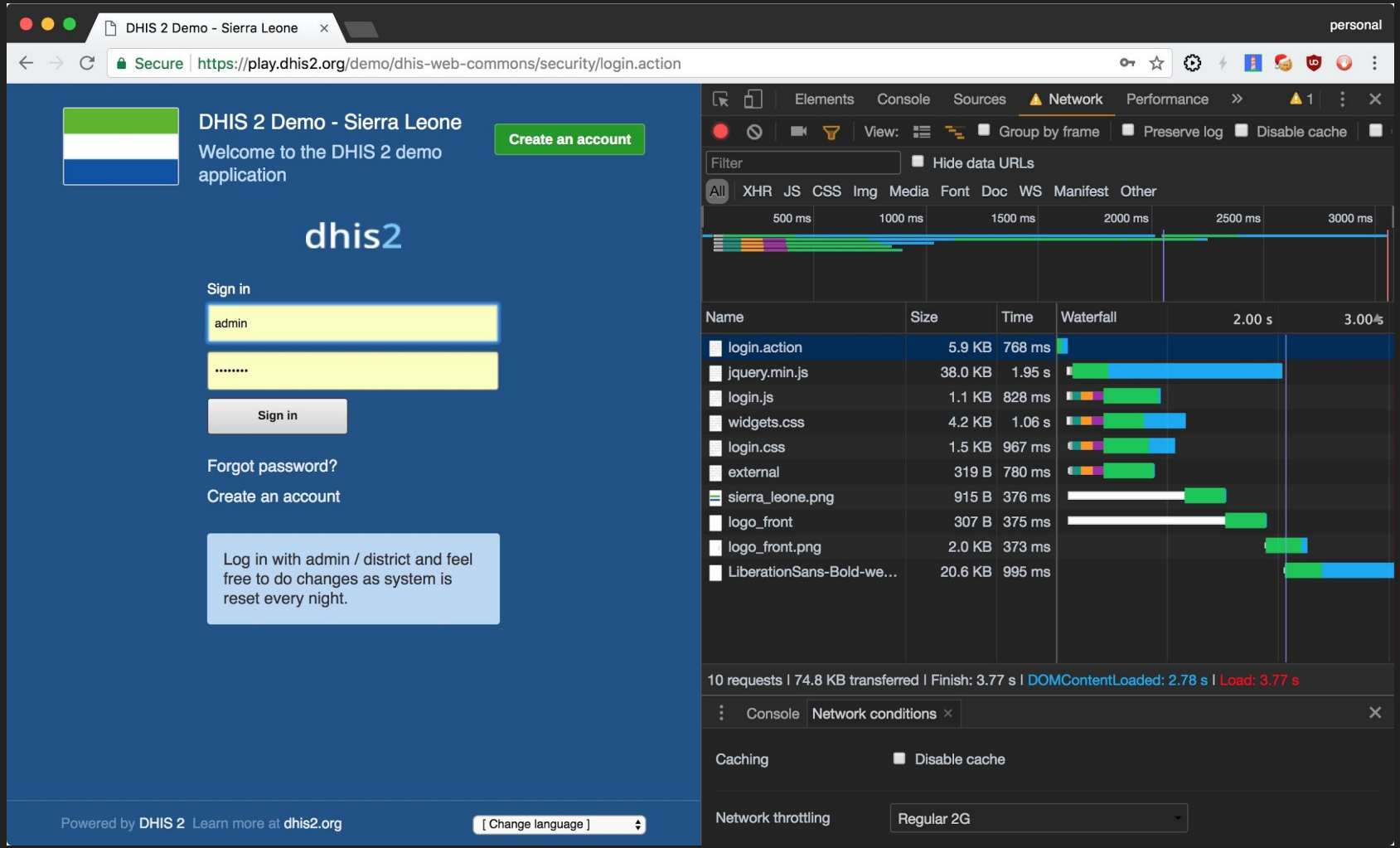
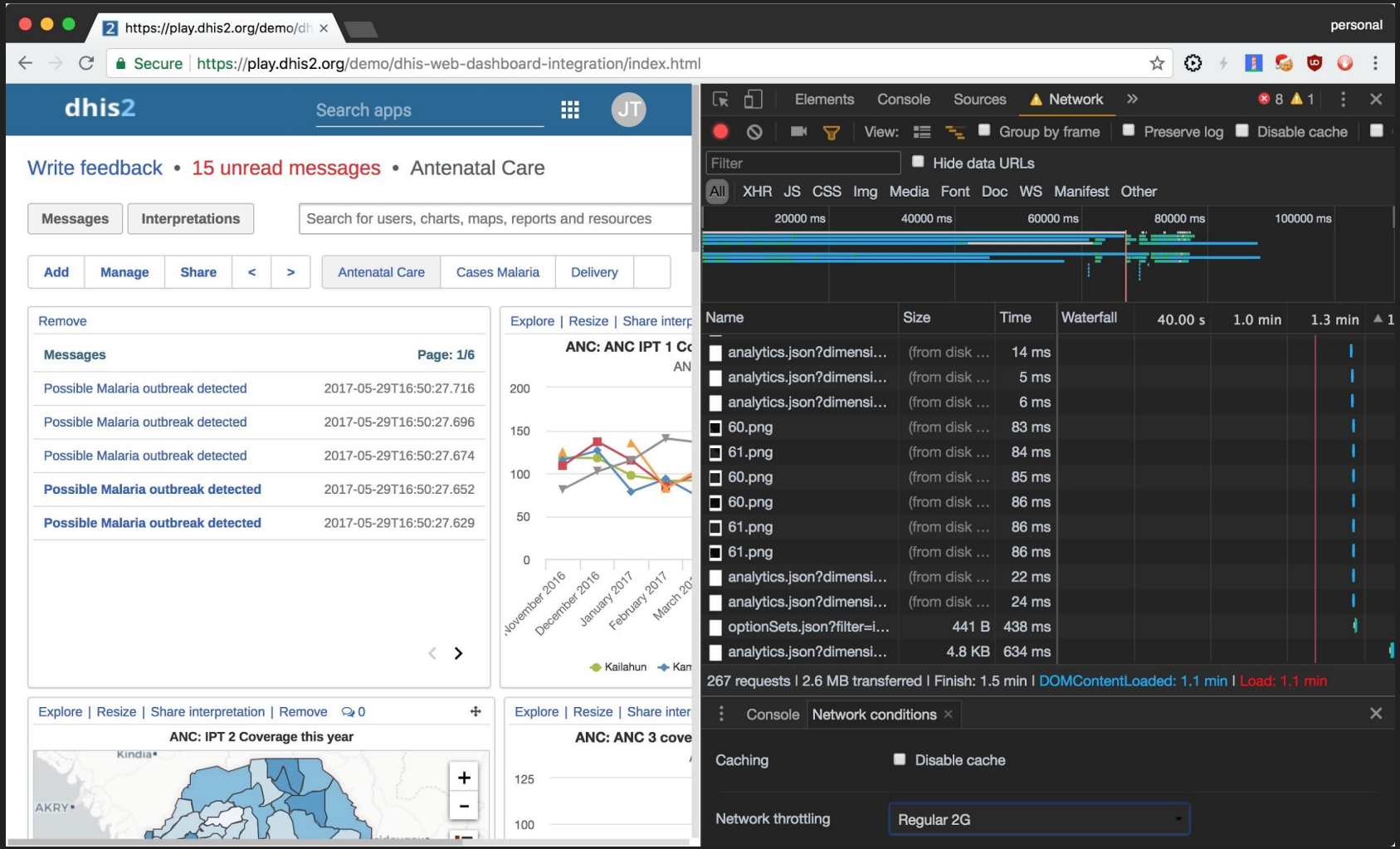
WS
Manifest
Other
500 ms
1000 ms
1500 ms
2000 ms
2500 ms
3000 ms
Name
Size
Time
Waterfall
2.00 s
login_fade_bkgd.png (from ...) 0 ms
login_siteheader_bkgd.gif (from ...) 0 ms
inlinenav_fade_bkgd.png (from ...) 0 ms
sysuser_fade_bkgd.png 605 B 554 ms
lock_open.png 1.1 KB 879 ms
loggin_pic_bkgd.png (from ...) 0 ms
nav_left.gif (from ...) 0 ms
sitecontent_bkgd.gif (from ...) 0 ms
icon_update.gif 1.1 KB 1.29 s
icon_search.gif 1.1 KB 1.57 s
icon_create.gif 1.1 KB 2.18 s
icon_admindb.gif 857 B 1.90 s
icon_default.gif 1.0 KB 1.83 s
32 requests | 13.6 KB transferred | Finish: 3.98 s | DOMContentLoaded: 1.61 s | Load: 3.99 s
Console
Network conditions
Caching
Disable cache
Network throttling
Regular 2G


DHIS 2 Demo - Sierra Leone
personal
Secure https://play.dhis2.org/demo/dhis-web-commons/security/login.action
DHIS 2 Demo - Sierra Leone
Welcome to the DHIS 2 demo application
Create an account
dhis2
Sign in
admin
Sign in
Forgot password?
Create an account
Log in with admin / district and feel free to do changes as system is reset every night.
Powered by DHIS 2 Learn more at dhis2.org
[ Change language ]
Elements Console Sources Network Performance
View: Group by frame Preserve log Disable cache
Filter Hide data URLs
All XHR JS CSS Img Media Font Doc WS Manifest Other
500 ms 1000 ms 1500 ms 2000 ms 2500 ms 3000 ms
Name Size Time Waterfall 2.00 s 3.00 s
login.action 5.9 KB 768 ms
jquery.min.js 38.0 KB 1.95 s
login.js 1.1 KB 828 ms
widgets.css 4.2 KB 1.06 s
login.css 1.5 KB 967 ms
external 319 B 780 ms
sierra_leone.png 915 B 376 ms
logo_front 307 B 375 ms
logo_front.png 2.0 KB 373 ms
LiberationSans-Bold-we... 20.6 KB 995 ms
10 requests | 74.8 KB transferred | Finish: 3.77 s | DOMContentLoaded: 2.78 s | Load: 3.77 s
Console Network conditions
Caching Disable cache
Network throttling Regular 2G


https://play.dhis2.org/demo/dh
personal
Secure https://play.dhis2.org/demo/dhis-web-dashboard-integration/index.html
dhis2
Search apps
JT
Write feedback • 15 unread messages • Antenatal Care
Messages
Interpretations
Search for users, charts, maps, reports and resources
Add
Manage
Share
<
>
Antenatal Care
Cases Malaria
Delivery
Remove
Messages
Page: 1/6
Possible Malaria outbreak detected 2017-05-29T16:50:27.716
Possible Malaria outbreak detected 2017-05-29T16:50:27.696
Possible Malaria outbreak detected 2017-05-29T16:50:27.674
Possible Malaria outbreak detected 2017-05-29T16:50:27.652
Possible Malaria outbreak detected 2017-05-29T16:50:27.629
Explore | Resize | Share interp
ANC: ANC IPT 1 Co
AN
200
150
100
50
0
November 2016
December 2016
January 2017
February 2017
Kailahun
Explore | Resize | Share interpretation | Remove 0
ANC: IPT 2 Coverage this year
Kindia
AKRY
Explore | Resize | Share inter
ANC: ANC 3 cove
125
100
Elements
Console
Sources
Network
8 1
View:
Group by frame
Preserve log
Disable cache
Filter
Hide data URLs
All
XHR
JS
CSS
Img
Media
Font
Doc
WS
Manifest
Other
20000 ms
40000 ms
60000 ms
80000 ms
100000 ms
Name
Size
Time
Waterfall
40.00 s
1.0 min
1.3 min
analytics.json?dimensi... (from disk ... 14 ms
analytics.json?dimensi... (from disk ... 5 ms
analytics.json?dimensi... (from disk ... 6 ms
60.png (from disk ... 83 ms
61.png (from disk ... 84 ms
60.png (from disk ... 85 ms
60.png (from disk ... 86 ms
61.png (from disk ... 86 ms
61.png (from disk ... 86 ms
analytics.json?dimensi... (from disk ... 22 ms
analytics.json?dimensi... (from disk ... 24 ms
optionSets.json?filter=i... 441 B 438 ms
analytics.json?dimensi... 4.8 KB 634 ms
267 requests | 2.6 MB transferred | Finish: 1.5 min | DOMContentLoaded: 1.1 min | Load: 1.1 min
Console
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Regular 2G

# Proposal language

**Provide evidence that web applications have adopted best practices in website performance optimization over unreliable 2G mobile networks.**

# Lighthouse
Version: 2.6.0

- Progressive Web App 27
- Performance 3
- Accessibility 63
- Best Practices 56

Results for: https://play.dhis2.org/demo/dhis-web-dashboard-integration/index.html
Dec 3, 2017, 6:21 PM EST • ▸ Runtime settings

## Diagnostics
More information about the performance of your application.

- ▸ Has enormous network payloads: Total size was 4,589 KB 33
- ▸ Uses inefficient cache policy on static assets: 159 assets found 17
- ▸ Uses an excessive DOM size: 4,017 nodes 5
- ▸ Critical Request Chains: 78
- ▸ JavaScript boot-up time is too high: 17,740 ms ✕
- ▸ Main thread work breakdown: 22,470 ms

▸ 5 Passed Audits

## Accessibility
These checks highlight opportunities to improve the accessibility of your app.

63

### Elements Use Attributes Correctly
These are opportunities to improve the configuration of your HTML elements.

- ▸ Image elements do not have `[alt]` attributes. ✕

# Resources

Primer on Latency and Bandwidth, from 'High Performance Browser Networking' by Ilya Grigorik, read for free at: https://hpbn.co/primer-on-latency-and-bandwidth/

Using Google's Lighthouse to audit webpage performance in Chrome DevTools: https://developers.google.com/web/tools/lighthouse/

Network analysis and throttling using Chrome DevTools: https://developers.google.com/web/tools/chrome-devtools/network-performance/