360 Browser Update
CAB F2F48 @ Guangzhou

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360Browser – The most popular browser in China

360 Extreme Browser
360 Secure Browser
360 Enterprise Browser

iResearch: Browser End User penetration rate in China

MAU: 400M
DAU: 80M

<table>
<thead>
<tr>
<th>Browser</th>
<th>2018Q3</th>
<th>2019Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>360</td>
<td>81%</td>
<td>85%</td>
</tr>
<tr>
<td>IE</td>
<td>20%</td>
<td>23%</td>
</tr>
<tr>
<td>Chrome</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Sogou</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Firefox</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>2345</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>QQ</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>UC</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Cheetah/Kingsoft</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

MAU: 400M DAU: 80M
PC browser remains internet entrance

- PC still eat 50% internet traffic, and browser is >50% for daily use
- PC browser users are mainly on OFFICE work scenarios
HTTPS percentage in China relatively low (65%) compared with US/EU and other golden bricks countries.

HTTPS in China government websites is 47%[1], while US government websites are 100%[2]

[1] Based on 111,529 government websites by 360, July 2019

Source: https://transparencyreport.google.com/https/overview (expect China) and 360 (China)
### 360 Root Store updates

<table>
<thead>
<tr>
<th>CA</th>
<th>Roots</th>
<th>Status</th>
</tr>
</thead>
</table>
| iTrusChina  | • vTrus Root CA  
             • vTrus ECC Root CA                                                | Added after Sept. releases       |
| CFCA        | • CFCA EV ROOT                                                       | To be released                   |
| HARICA      | • Hellenic Academic and Research Institutions RootCA 2015            | To be released                   |
|             | • Hellenic Academic and Research Institutions ECC RootCA 2015       |                                  |
|             | • Hellenic Academic and Research Institutions RootCA 2011           |                                  |

### 360 root store update to all products

10% ➔ 100%
SSL Errors

Cert Errors by PV (based on July 2019)

- DATE_INVALID: 1129605
- COMMON_NAME_INVALID: 218821
- CT_COMPLIANCE_FAILED: 72273
- AUTHORITY_INVALID: 40868
- SHA1_SIGNATURE_PRESENT: 34431
- WEAK_SIGNATURE_ALGORITHM: 32486
Untrusted CA root risks

1% visit from Untrusted roots, Finance & Pay are under high risks

<table>
<thead>
<tr>
<th>Category</th>
<th>Untrusted root PV</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>Alipay 1%, TenPay 2%, CCB 1%</td>
<td>High</td>
</tr>
<tr>
<td>Shopping</td>
<td>Taobao 1%, JD 2%</td>
<td>High</td>
</tr>
<tr>
<td>Search Engine</td>
<td>Baidu 4%, Google 1%</td>
<td>Medium</td>
</tr>
<tr>
<td>Social Media</td>
<td>Weibo 3%</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Anti-AD normally installed by user

Unknown source, 360 secure team investigating
Extreme Browser 12 Preview release

- Dual Engine: Trident + Chromium 78
- DoH Enabled w/ 360 server
- New Dark Theme
- 4K video support
- Windows XP SP2+
- NPAPI support
- 360 added features
360 MiniApp

- Extend mini app from mobile to PC, more suitable to big screen
- Native user experience w/o browser UI with enhanced API support (170+)
- Centralized App publish/update/payment, full life cycle management
- Full toolchain support and developer community/activities, and empowered by 360 products ecosystem support
- Joint-effort on W3C CG and partners

MiniApps Ecosystem Community Group

A community group to incubate work on MiniApps and serve as a base for analysis and proposals of specific work items

Launched: 2019-09-19
Participants: 0

JOIN GROUP
Plan

- Update all products to Chromium 78 based
- 360 CT log server setup
- CRLSets auto crawl support
- Untrusted roots investigation
Thanks

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