The s390 aka system z port of OpenJdk

The goal of this project is to provide a full-featured and certifiable Linux/s390x port of OpenJDK in the main OpenJDK development branch. Once this is achieved, this project will maintain the port in the head repository and all releases in maintenance.

Ongoing work

IBM is maintaining the port in jdk/jdk, jdk21u, jdk17u, jdk11u and further new releases.

Contributions

Contributions to the port are always welcome. We maintain some issues in the OpenJDK Jira, feel free to address any of these:

Proposed enhancements

Bugs and all other issues

People

See OpenJDK census

Supported features

The table lists in which JDK version the support for the feature was added.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Linux</th>
</tr>
</thead>
<tbody>
<tr>
<td>template interpreter</td>
<td>9</td>
</tr>
<tr>
<td>C2 compiler</td>
<td>9</td>
</tr>
<tr>
<td>C1 compiler</td>
<td>9</td>
</tr>
<tr>
<td>Servicability agent</td>
<td>9</td>
</tr>
<tr>
<td>Class Data Sharing</td>
<td>11</td>
</tr>
<tr>
<td>Java Flight Recorder</td>
<td>11</td>
</tr>
<tr>
<td>Epsilon GC</td>
<td>11</td>
</tr>
<tr>
<td>JVMI / graal</td>
<td>no</td>
</tr>
<tr>
<td>ZGC / Shenandoah</td>
<td>no</td>
</tr>
<tr>
<td>recognizes z14 and z15 processors</td>
<td>17</td>
</tr>
<tr>
<td>Vector API</td>
<td>no</td>
</tr>
<tr>
<td>loom</td>
<td>no</td>
</tr>
<tr>
<td>panama</td>
<td>21.0.2</td>
</tr>
</tbody>
</table>

Status

In 2024, JDK 22 has been released.

In 2023, JDKs 21 and 20 have been released. Support for Panama was implemented and reached 21 in 21.0.2.

In 2022, JDKs 19 and 18 have been released. Support for jdk 11 and 17 was continued.

In 2021, JDKs 17 and 16 as well as the security updates for 11, 15 and 16 have been released. Support of the new processors z14 and z15 has been implemented. SAP terminated its efforts for the s390 platform after release of 17 and for 11 after update 11.0.12.

In 2020, JDK 14 and 15 have been released as well as the security updates for 11, 13, 14 and 15. A row of bugs have been fixed. GHASH intrinsics were implemented.

SAP does not actively maintain the port in the long-term-support releases of JDK 13 and 15.

In 2019, JDK 12 and 13 have been released, as well as the security updates for 11, 12 and 13.

In 2018, JDK 10 and JDK 11 have been released for linuxs390x. Since JDK 11 Class Data Sharing and Java Flight Recorder are supported.

Many issues have been fixed.

In 2017, JDK 9 has been released for linuxs390x.
In **November 2016** the port has been integrated into the jdk9/hs repository. It passes the jtest and jck test suites in a similar scope as other platforms.

**Resources**

- **s390x Port Project**
- **Repository**
- **Mailing list:** s390x-port-dev

**Recent space activity**

- **Goetz Lindenmaier**
  - The s390 aka system z port of OpenJdk updated Apr 30, 2024
  - JDK 9 and the s390x port updated Jan 14, 2019

- **Iris Clark**
  - The s390 aka system z port of OpenJdk updated Jun 15, 2016

**Space contributors**

- **Goetz Lindenmaier** (60 days ago)
- **Iris Clark** (2935 days ago)