我们为什么不热衷 OpenStack？

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Is the Cloud ready for the Big Data?
马云: Upload manufacturers online

范敏: Upload Hotels online

马化腾: Upload People online

张涛: Upload Restaurants online
What to upload next?

Upload sensor data → Internet of things

Upload knowledge → Knowledge graph
What to do with the already uploaded content?

Find the content → Search Engine
Find the goods → Recommendation
Find the causality → Diagnosis
Data + Knowledge
Knowledge Graph for Diagnosis

- Fever
- Blood test
- Results
- Stool test

Dysentery

Medical Test
Many Diagnosis Apps

Disease Diagnosis

Financial Fraud

Car Fault

Computer Virus
Is the Cloud ready for the Big Data and Knowledge Graph?
Is today’s Graph Database ready to use?
Does K-V Database fit Knowledge Graph?

<table>
<thead>
<tr>
<th>Case</th>
<th>Node</th>
<th>Node</th>
<th>Node</th>
<th>Edge</th>
<th>Edge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 1</td>
<td>n1</td>
<td>n2</td>
<td>n3</td>
<td>(n1, n2)</td>
<td>(n2, n3)</td>
</tr>
<tr>
<td>Case 2</td>
<td>n1</td>
<td></td>
<td>n3</td>
<td>(n1, n3)</td>
<td></td>
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<tr>
<td>Case 3</td>
<td></td>
<td>n2</td>
<td>n3</td>
<td></td>
<td>(n2, n3)</td>
</tr>
</tbody>
</table>
Clustering of Sparse Graph

\[ C_0 = \{0, 1, 2, 3, 4, 5, 7, 8, 10\} \]

\[ C_1 = \{2, 3, 4, 5, 6, 8, 9, 10\} \]

\[ C_2 = \{4, 6, 8, 9, 10, 11\} \]
Distributed Database for Sparse Graph
Dispatch Computing close to the Data
Scheduling the Intense Computing
Integrate the Knowledge System
Q&A