Risk Assessment example

Denise Dittrich
RWTH Aachen University, IT Center
Example

• Using cloud licensing für Microsoft 365

• Use case
  – New contract with Microsoft in May 2021
  – Initial situation: device based licenses, no cloud usage
  – New situation: user based licensed, cloud-managed licenses
  – Allowed cloud based applications: Microsoft Teams

• Questions:
  – Which data are transferred?
  – What are the risks we take by using cloud-managed licenses?
Steps to take

- Identity the transferred data
  - Documents
  - Search in user information

- 2 types of data
  - transferred by us (user information for authentication)
  - Collected by Microsoft during licensing process

- Identity the (additional) risks
  - List of cloud risks
## Scaling

<table>
<thead>
<tr>
<th>Impact</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Probability of Occurrence

<table>
<thead>
<tr>
<th>Probability</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Process

1. Identify risk and source of risk
2. Probability of occurrence
3. Impact / damage
4. Initial score
5. Define measure
6. Final score
Process

1. Identify risk and source of risk
   - Identity theft due to hacker attack

2. Probability of occurrence
   - Very likely = 4

3. Severity / damage
   - Significant consequences, data loss, maybe financial consequences = 3

4. Initial score
   - 12

5. Define measure
   - Authentication via local Identity Management, no password / username transferred
   - Firewalling, anti-virus software, encrypted transport
   - 2 factor authentication ...

6. Final score
   - Low risk
**Process**

1. **Identify risk and source of risk**
2. **Probability of occurrence**
3. **Severity / damage**
4. **Initial score**
5. **Define measure**
6. **Final score**

**Data access by third parties (Microsoft / US government)**
- Access possible = 3
- Significant consequences, data loss, maybe financial consequences = 3
- Initial score = 9
- Define measure:
  - Minimize stored data
  - DPA with Microsoft
- Final score: medium risk
Measures to lower risk (examples)

• Organisational measures
  – Data processing contracts
  – Support contracts (to minimize impact)

• Technical measures
  – Minimize transferred data
  – Backup / redundancies
  – Configuration set
  – Use local authentication methods and 2 FA
Results

• „Verify“ scores
  – With team members
  – Data security officer

• Actual risks are visible for everybody

• No risk labelled as „high risk“ (after regarding measures)

• Planned: risk assessments for M365 applications
Thank you for your attention