ARCHITECTURE DRIVER ELICITATION AND PRIORITIZATION

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AGENDA

- Evaluation and Prioritization Procedurce
- Partner-Specific Evaluation
- Overall Evaluation
- Conclusion
- Next Steps

Architecture Scenario Elicitation and Prioritization Procedure

- Interviews with all partners (stakeholders) to elicit architecture drivers
- Driver consolidation and review
- Partner-specific prioritization
- Overall driver prioritization

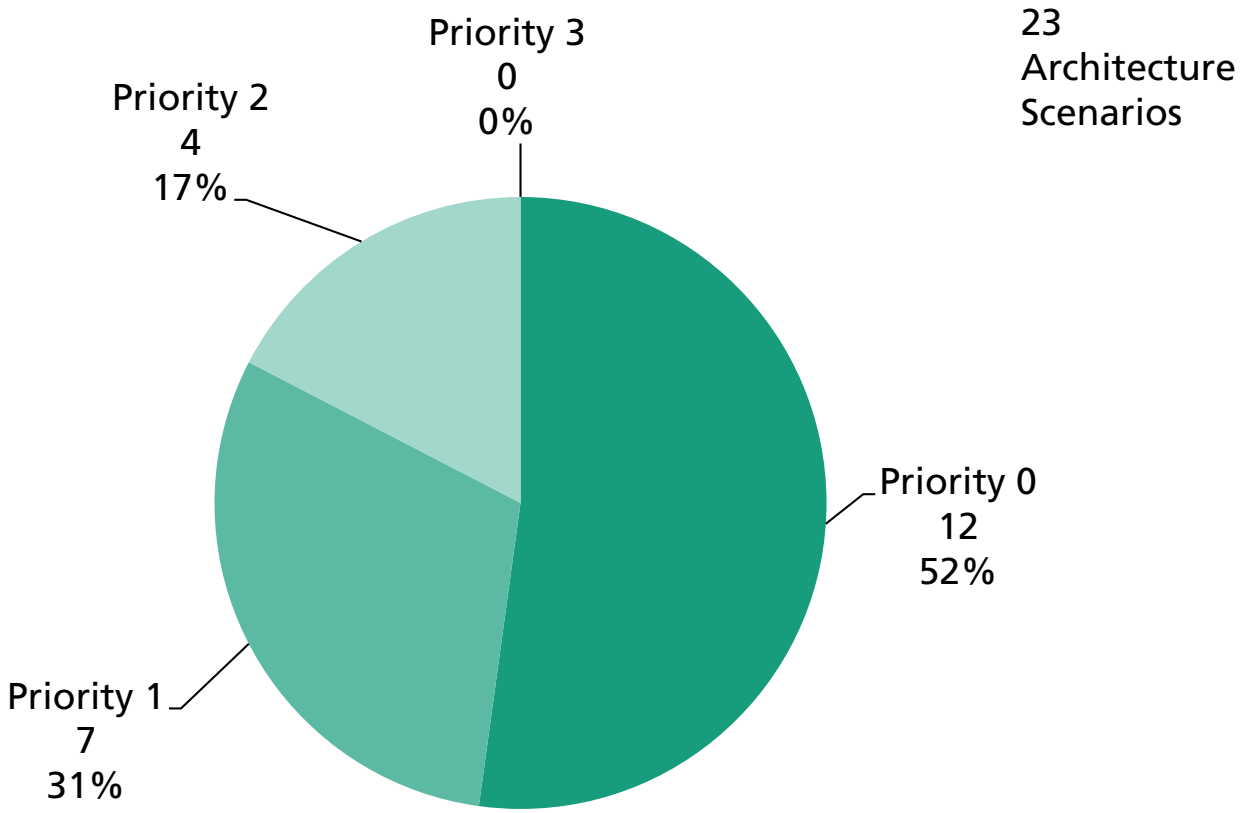
Architecture Driver Elicitation

	A	B	C	D	E	F
1	ID	Name	Driver	Quantification	Status	Kommentar
2	ASR.Availability.01	Resilient OIH Platform	The OIH platform is reachable by the ISVs. A failure happens. The OIH platform is at most for n minutes not reachable.	n <= 60	Open	
3	ASR.Availability.04	Update Buffering	The OIH platform is up and running and ISVs are integrated with the OIH platform. Updates happen in a cloud app of an ISV. The updates are buffered up to n days if the connection to the OIH platform is lost.	n = 30	Open	
4	ASR.BusinessGoal.04	App Communication	An ISV wants to make its cloud app available to the OIH platform. The ISV implements a working connector. The connector is able to communicate with the other connectors of the app store.		Open	
5	ASR.Datamodel.03	Project-Independent Data Model	The OIH data model is ready to use. A company wants to develop a cloud app, which is not planned to integrate with the OIH platform. The company can use the OIH data model to model its data.		Open	
6	ASR.Datamodel.04	Backward Compatibility	ISVs are integrated with the OIH platform. Data is exchanged between cloud apps of ISVs. A change to a data model happens. The change should be backward compatible and thus, only optional attributes should be added but none deleted or changed.		Open	
7	ASR.Documentation.01	Well Documented Interfaces	The OIH platform is ready for usage. A developer wants to use the OIH platform to built up an app store. The interfaces of OIH are well documented.		Open	
8	ASR.Documentation.02	Well Documented Data Model	The OIH platform is ready for usage. A developer wants to use the OIH platform to built up an app store. The data model of OIH is well documented.		Open	
9	ASR.Extensibility.01	Data Model Extensibility	The OIH platform is running and a data model is deployed. The data model must be extended by new attributes. The data model can be extended without losing the capability of synchronization.		Open	
10	ASR.Extensibility.02	New App Integration Time	The OIH platform is running and ready to integrate ISVs. A developer team develops a new app or wants to port an already existing one. The developer team is ready to integrate with the OIH platform after at most n days.	n <= 35-40	Open	

Partner-Specific Prioritization

	A	B	D	E	G	M	N
1						0 points left	
2	ID	Name	Driver	Quantification	StoneOne	Priority 0=low 3=very high	Kommentar
3	ASR.Availability.01	Resilient OIH Platform	The OIH platform is reachable by the ISVs. A failure happens. The OIH platform is at most for n minutes not reachable.	$n_{StoneOne} <= 30$	x	2	
4	ASR.Availability.02	Automatic Restart	The OIH platform is up and running. A system failure happens. Thus, a subsystem is no longer available. The subsystem restarts automatically.		x	2	
5	ASR.Availability.03	Automatic Restart Failure	The OIH platform is up and running. A system failure happens. Thus, a subsystem is no longer available and tries to restart automatically. The restart fails. The responsible persons are notified of the failed restart.		x	1	
14	ASR.BusinessGoal.01	App Store Communication	Several app stores are available. It is planned to get and send data from / to apps of the different app stores. The OIH platform is used to exchange the data.		x	1	
15	ASR.BusinessGoal.02	OIHaaS	The OIH platform is ready to use. An developer team implements an app store based on the OIH platform. The OIH platform can be used like a service which can be called.		x	0	
20	ASR.Constraints.01	Protection of privacy	The OIH platform is ready to use and ISVs are integrated with the OIH platform. The OIH platform handles personal data. The OIH platform is able to meet the requirements of EU-DSGV and BDSG.		x	0	
21	ASR.Constraints.02	Data sovereignty of the User	The OIH platform is ready to use and ISVs are integrated with the OIH platform. A user of the platform wants to set access rights of his data. The user is able to lock and release his data in the OIH platform.		x	0	
35	ASR.Documentation.01	Well Documented Interfaces	The OIH platform is ready for usage. A developer wants to use the OIH platform to built up an app store. The interfaces of OIH are well documented.		x	2	Was heißt "well documented"?
36	ASR.Documentation.02	Well Documented Data Model	The OIH platform is ready for usage. A developer wants to use the OIH platform to built up an app store. The data model of OIH is well documented.		x	1	

Partner-Specific Prioritization : Stone One



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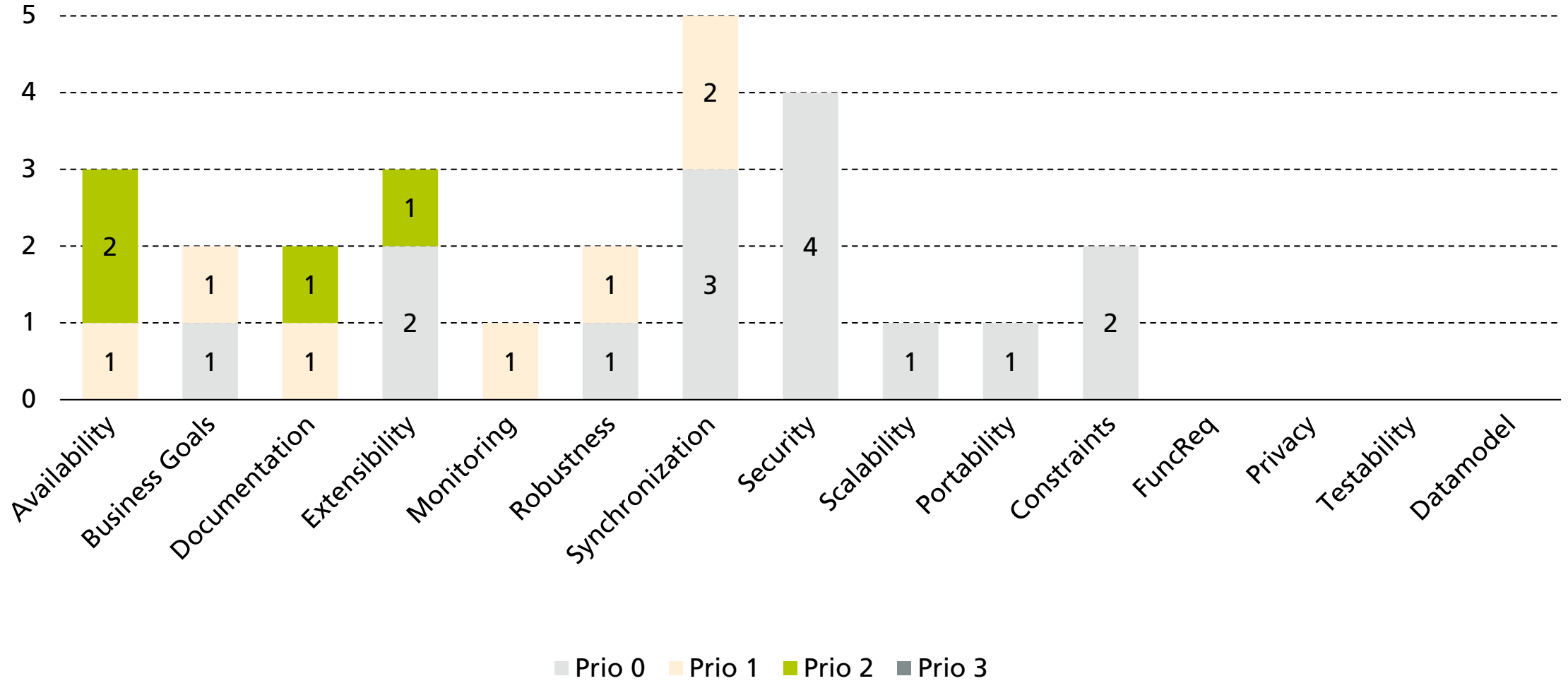
Partner-Specific Prioritization : Stone One



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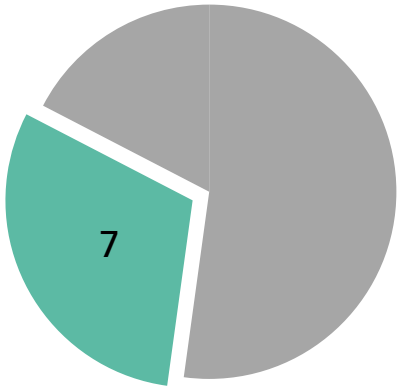
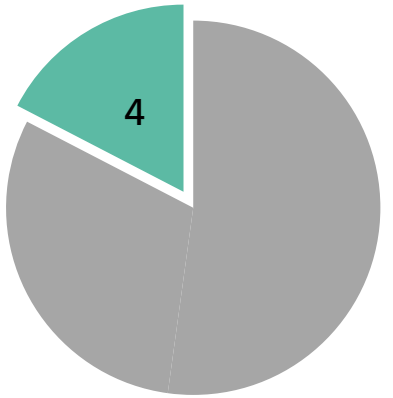
Partner-Specific Prioritization : Stone One



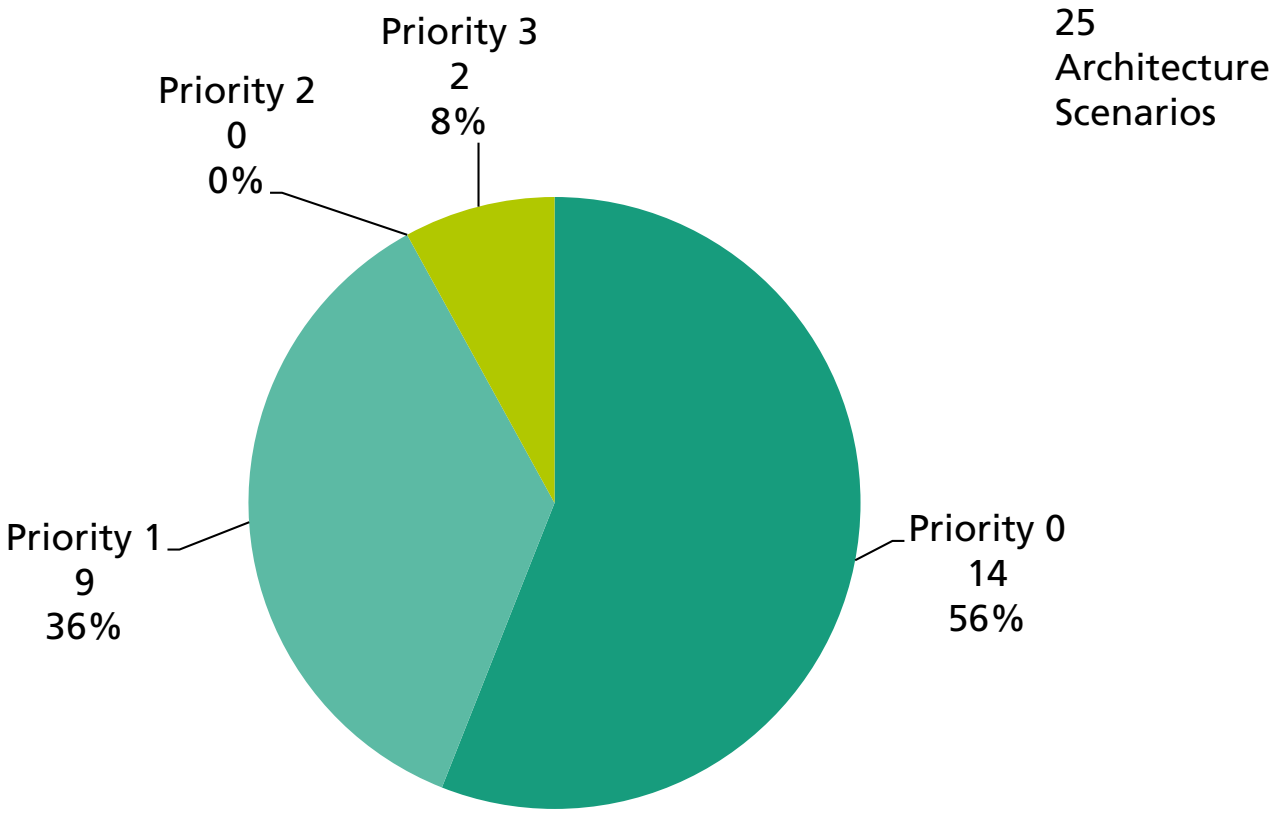
- Priority 1
  - Automatic Restart Failure (ASR.Availability.03)
  - App Store Communication (ASR.BusinessGoal.01)
  - Well Documented Data Model (ASR.Documentation.02)
  - Monitor Availability of the Platform (ASR.Monitoring.01)
  - App Buffering (ASR.Robustness.02)
  - Data Exchange between ISVs (ASR.Synchronization.01)
  - Data Exchange between App Stores (ASR.Synchronization.02)

Partner-Specific Prioritization : Stone One



- Priority 2
  - Resilient OIH Platform (ASR.Availability.01)
  - Automatic Restart (ASR.Availability.02)
  - Well Documented Interfaces (ASR.Documentation.01)
  - Data Model Extensibility (ASR.Extensibility.01)
- Priority 3
  - -

Partner-Specific Prioritization : Basaas



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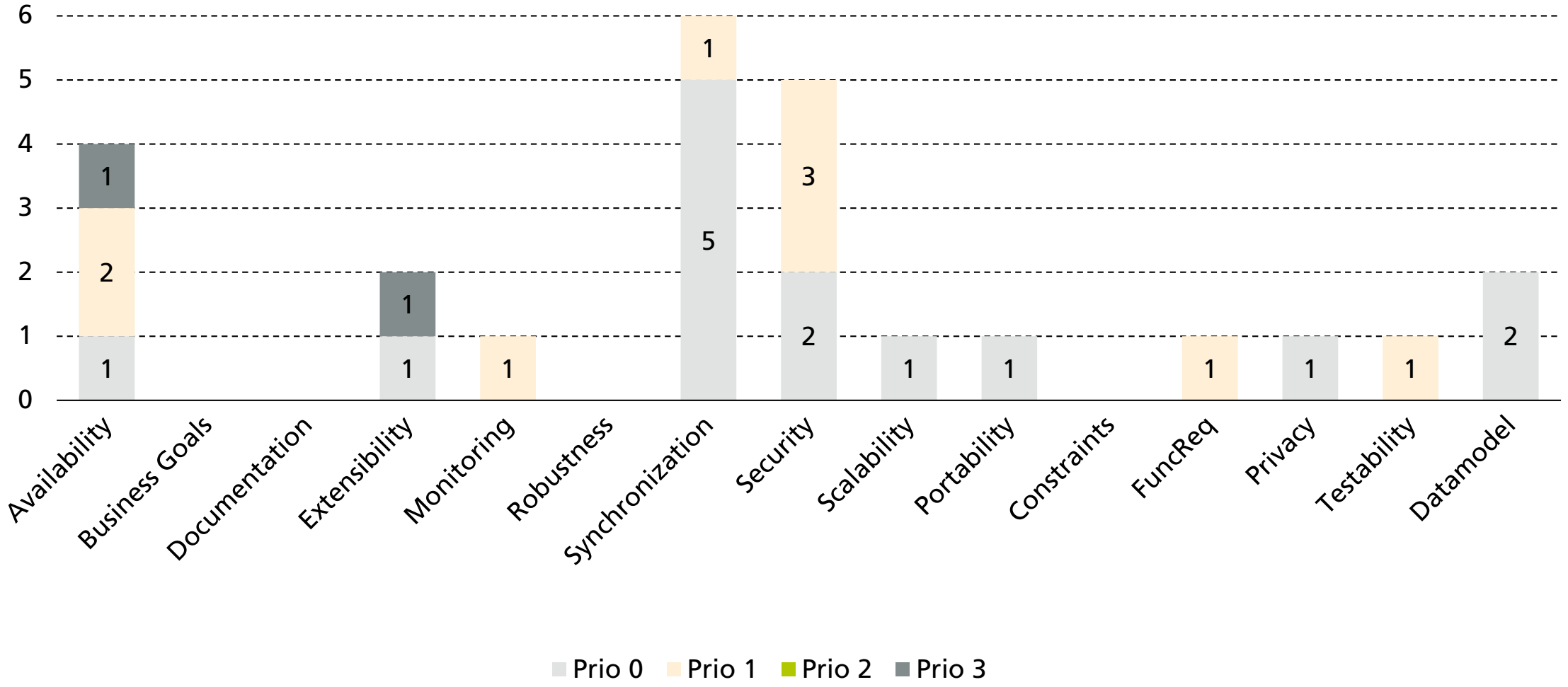
Partner-Specific Prioritization : Basaas



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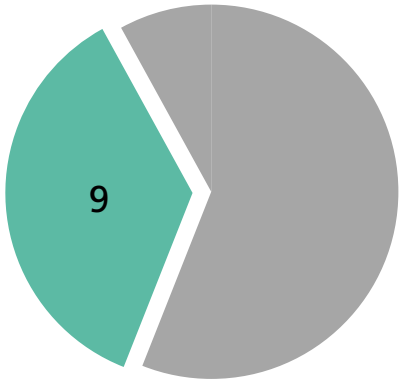
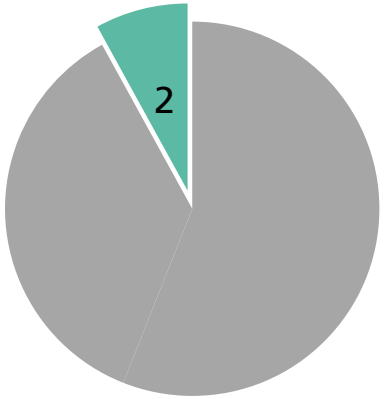
Partner-Specific Prioritization : Basaas



- Priority 1
  - Update Buffering (ASR.Availability.04)
  - Down Time (ASR.Availability.05)
  - Multitenant Capability (ASR.FuncReq.01)
  - Health Checks (ASR.Monitoring.02)
  - User Creation (ASR.Security.02)
  - Single-Sign-On (ASR.Security.04)
  - Code Review (ASR.Security.06)
  - Master Cloud app (ASR.Synchronization.08)
  - Test Calls (ASR.Testability.01)

Partner-Specific Prioritization : Basaas

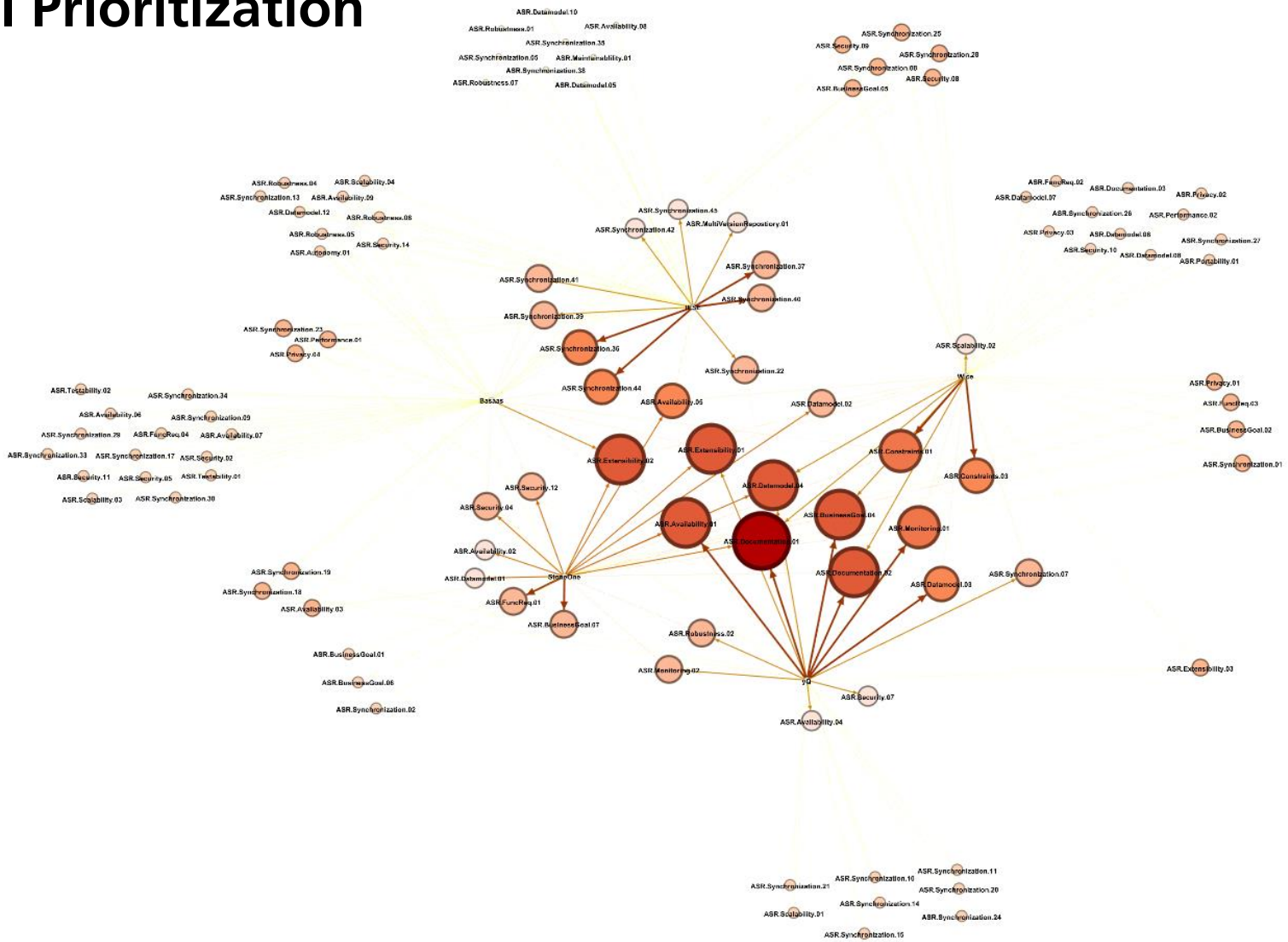


- Priority 2
  - -
- Priority 3
  - Connector Deployment Process (ASR.Availability.06)
  - New App Integration Time (ASR.Extensibility.02)

Overall Prioritization

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1						Mentioned by							46 points left	
2	ID	Name	Source	Driver	Quantification	StoneOne	Basaas	CES	WICE	yQ	elastic.io	IESE	Priority 0=low 3=very high	Kommentar
3	ASR.Autonomy.01	Independent Release Cycles	IESE	The OIH platform is up and running. Several ISV apps supporting at least one shared domain (e.g. contacts) are integrated with OIH. One of the ISVs is releasing a new version of its integrated cloud app. The release does not affect other ecosystem applications. It is not necessary to coordinate this release with the release plans of other integrated ISV apps.								x		
4	ASR.Availability.01	Resilient OIH Platform	StoneOne	The OIH platform is reachable by the ISVs. A failure happens. The OIH platform is at most for n minutes not reachable.	$n_{StoneOne}$ <= 30 n_{yQ} <= 60	x				x				
5	ASR.Availability.02	Automatic Restart	StoneOne	The OIH platform is up and running. A system failure happens. Thus, a subsystem is no longer available. The subsystem restarts automatically.		x								
6	ASR.Availability.03	Automatic Restart Failure	StoneOne	The OIH platform is up and running. A system failure happens. Thus, a subsystem is no longer available and tries to restart automatically. The restart fails. The responsible persons are notified of the failed restart.		x								
7	ASR.Availability.04	Update Buffering	Basaas	The OIH platform is up and running and ISVs are integrated with the OIH platform. Updates happen in a cloud app of an ISV. The updates are buffered up to n days if the connection to the OIH platform is lost.	n = 30		x			x				
8	ASR.Availability.05	Down Time	Basaas	The OIH platform is up and running and ISVs are integrated with the OIH platform. A failure happens. The OIH platform has an availability of at least n.	n_{Basaas} = 99,8% n_{Wice}=99,99% $n_{elastic.io}$ = 99,95% n_{IESE}=99,999% (Maxium downtime per year: 5.26 minutes, maximum downtime per month: 5.26 minutes)		x		x		x	x		
9	ASR.Availability.06	Connector Deployment Process	Basaas	The OIH platform is ready to integrate ISVs. A new release of a connector is ready for integration. The connector is uploaded. The connector is tested automatically and only deployed if all tests are successful.			x							

Overall Prioritization



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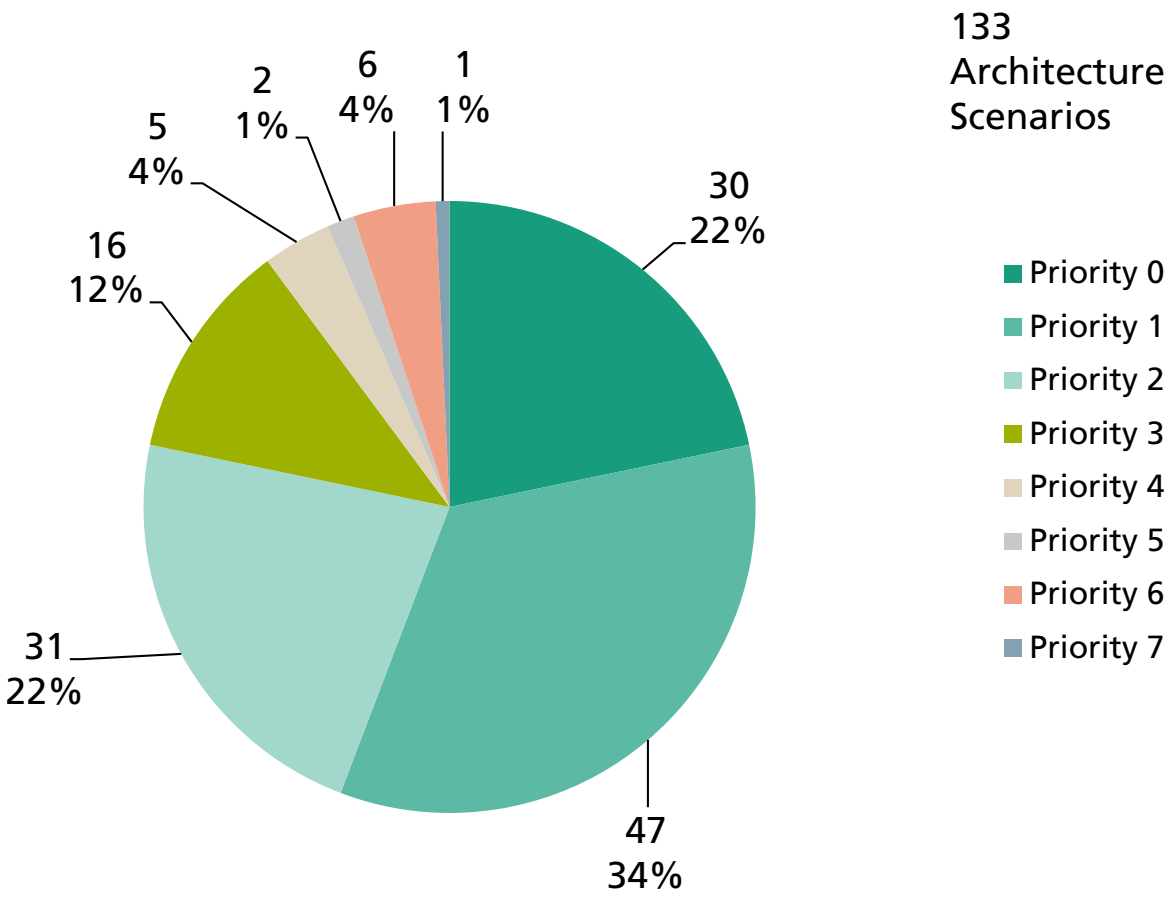
Overall Prioritization : All Scenarios



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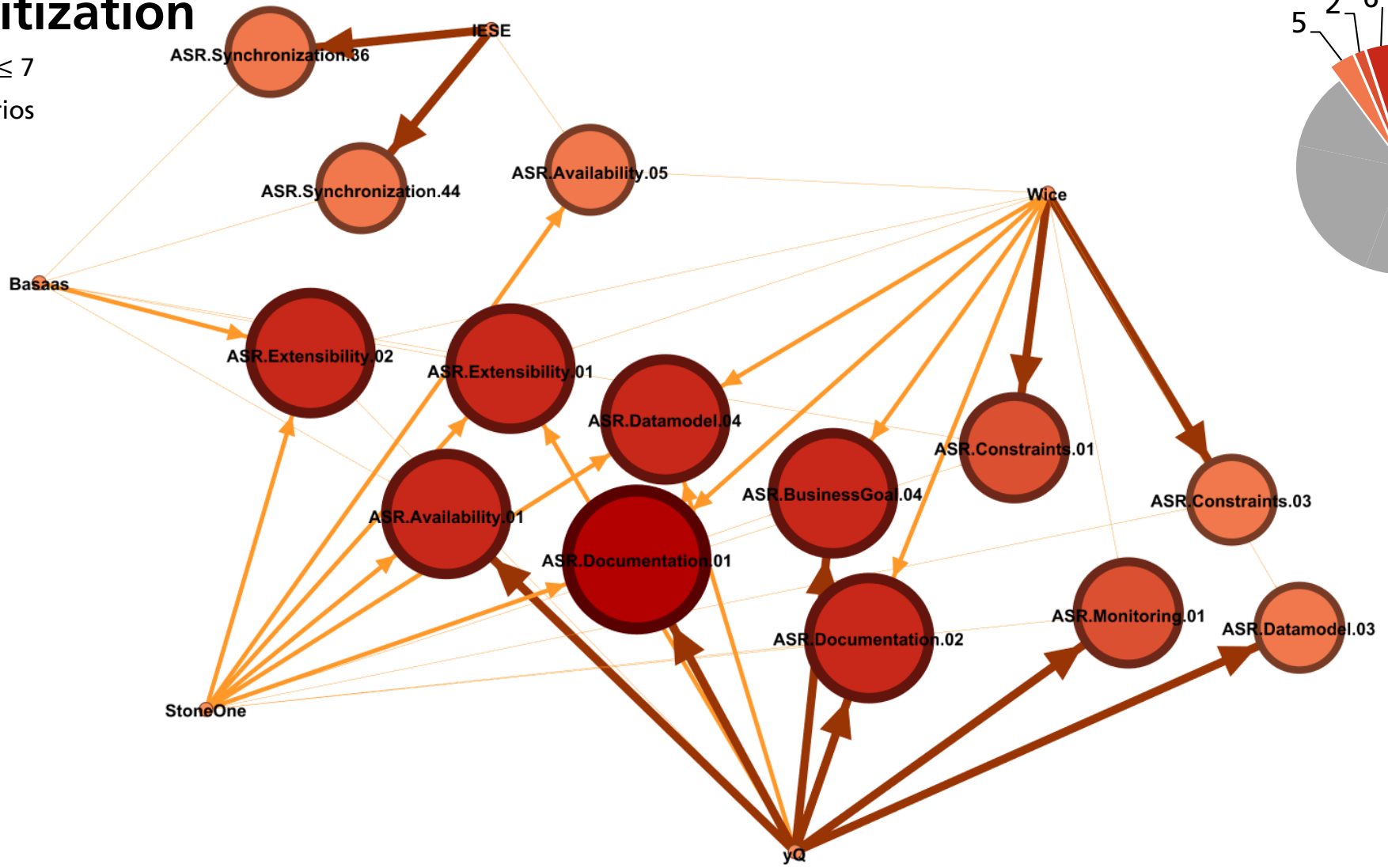
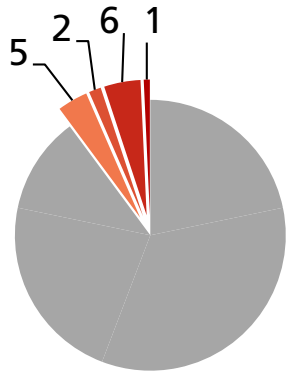
Overall Prioritization

4 ≤ Cumulative Priority ≤ 7

= 14 Architecture Scenarios





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Overall Prioritization: 4 ≤ Cumulative Priority ≤ 7

- Cumulative priority 7
  - Well Documented Interfaces (ASR.Documentation.01)
- Cumulative priority 6
  - New App Integration Time (ASR.Extensibility.02)
  - Data Model Extensibility (ASR.Extensibility.01)
  - Backward Compatibility (ASR.Datamodel.04)
  - App Communication (ASR.BusinessGoal.04)
  - Well Documented Data Model (ASR.Documentation.02)
  - Resilient OIH Platform (ASR.Availability.01)

Overall Prioritization: 4 ≤ Cumulative Priority ≤ 7

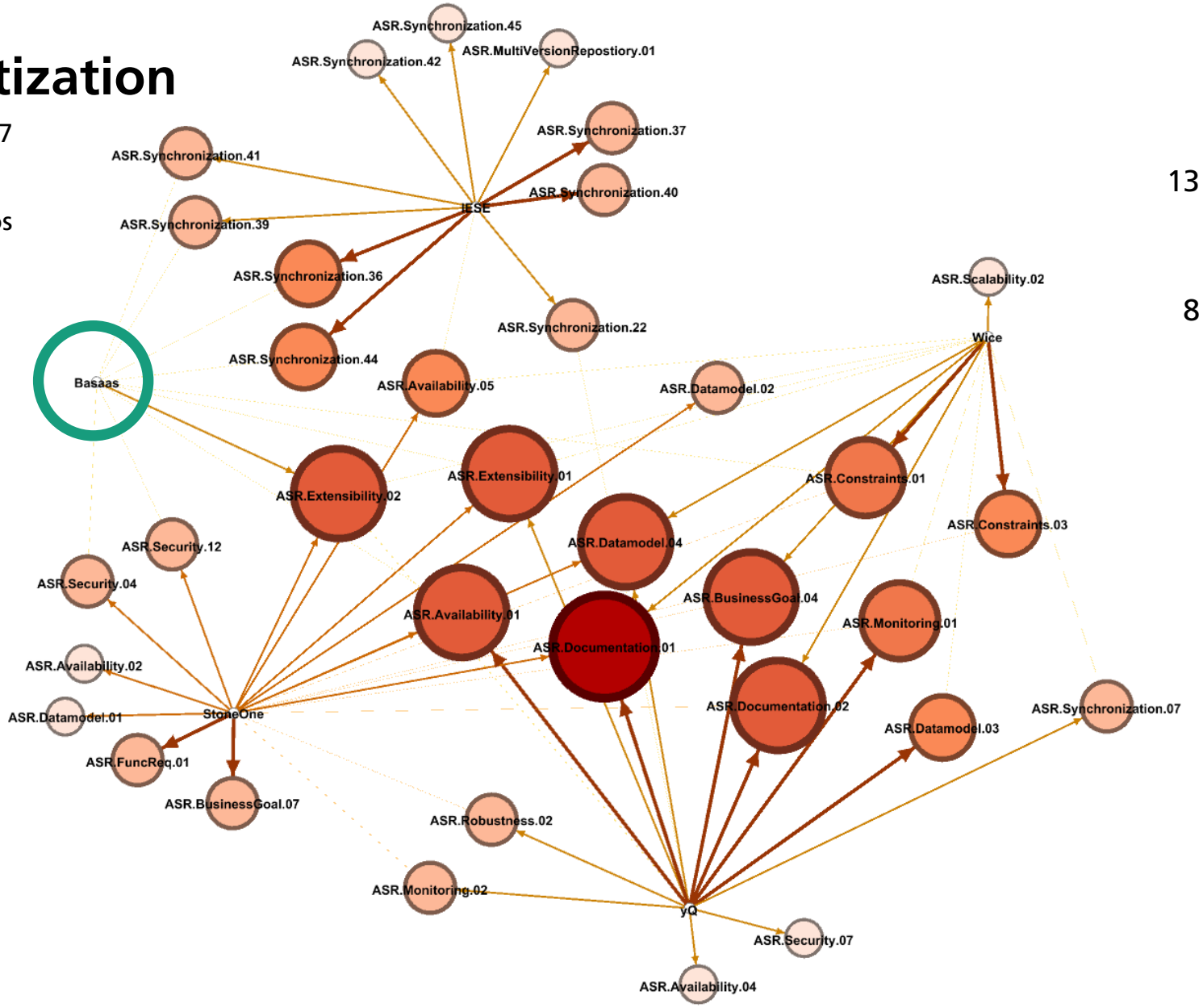
- Cumulative priority 5
  - Protection of privacy (ASR.Constraints.01)
- Cumulative priority 4
  - Down Time (ASR.Availability.05)
  - Support for operation-based synchronization (ASR.Synchronization.36)
  - Detection of Concurrency Anomalies (ASR.Synchronization.44)
  - Project-Independent Data Model (ASR.Datamodel.03)
  - User Right to Update User Information (ASR.Constraints.03)

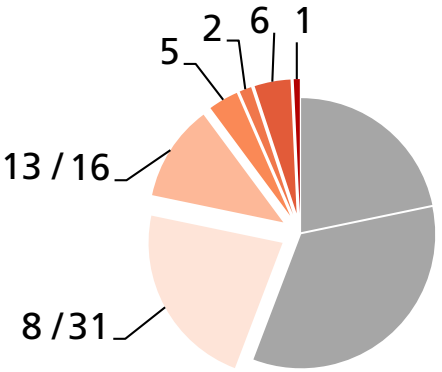
Overall Prioritization

$4 \leq$ Cumulative Priority ≤ 7

$\cup$ Partner Priority ≥ 2

$=$ 35 Architecture Scenarios





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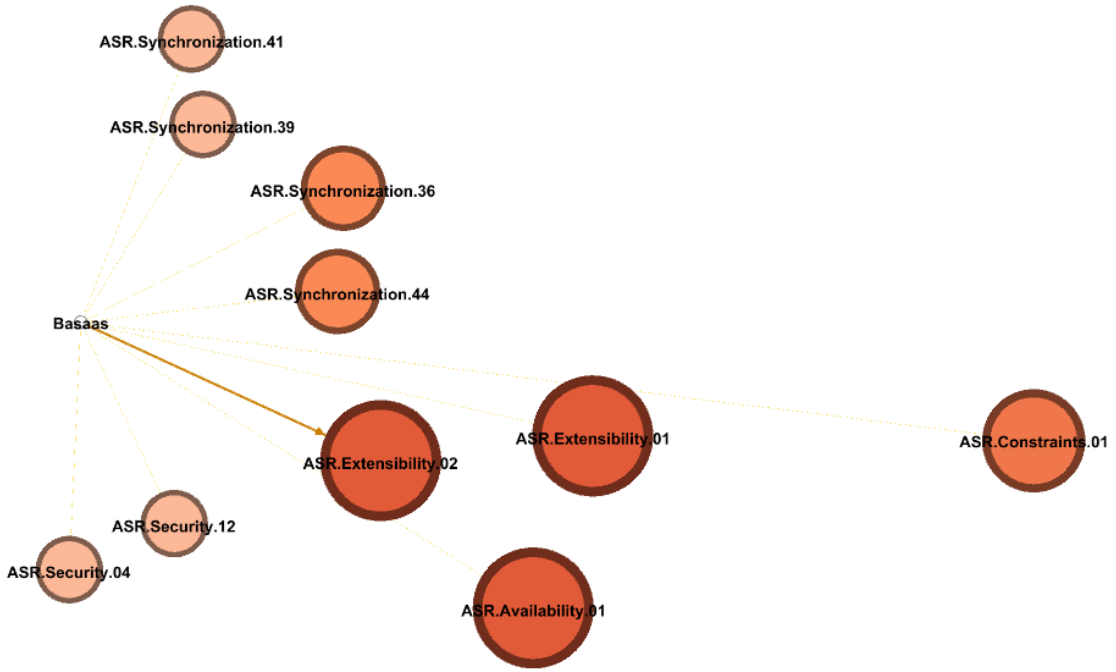
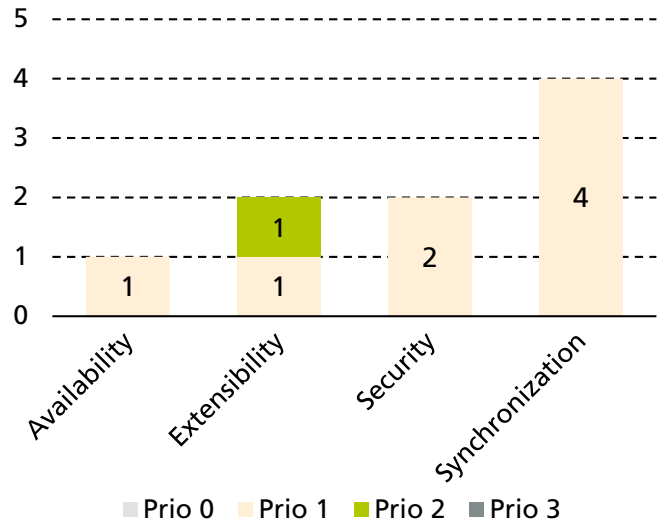
Overall Prioritization
Basaas



- 45 scenarios rated
  - 44 with priority 1
  - 1 with priority 2
  - 9 scenarios are covered



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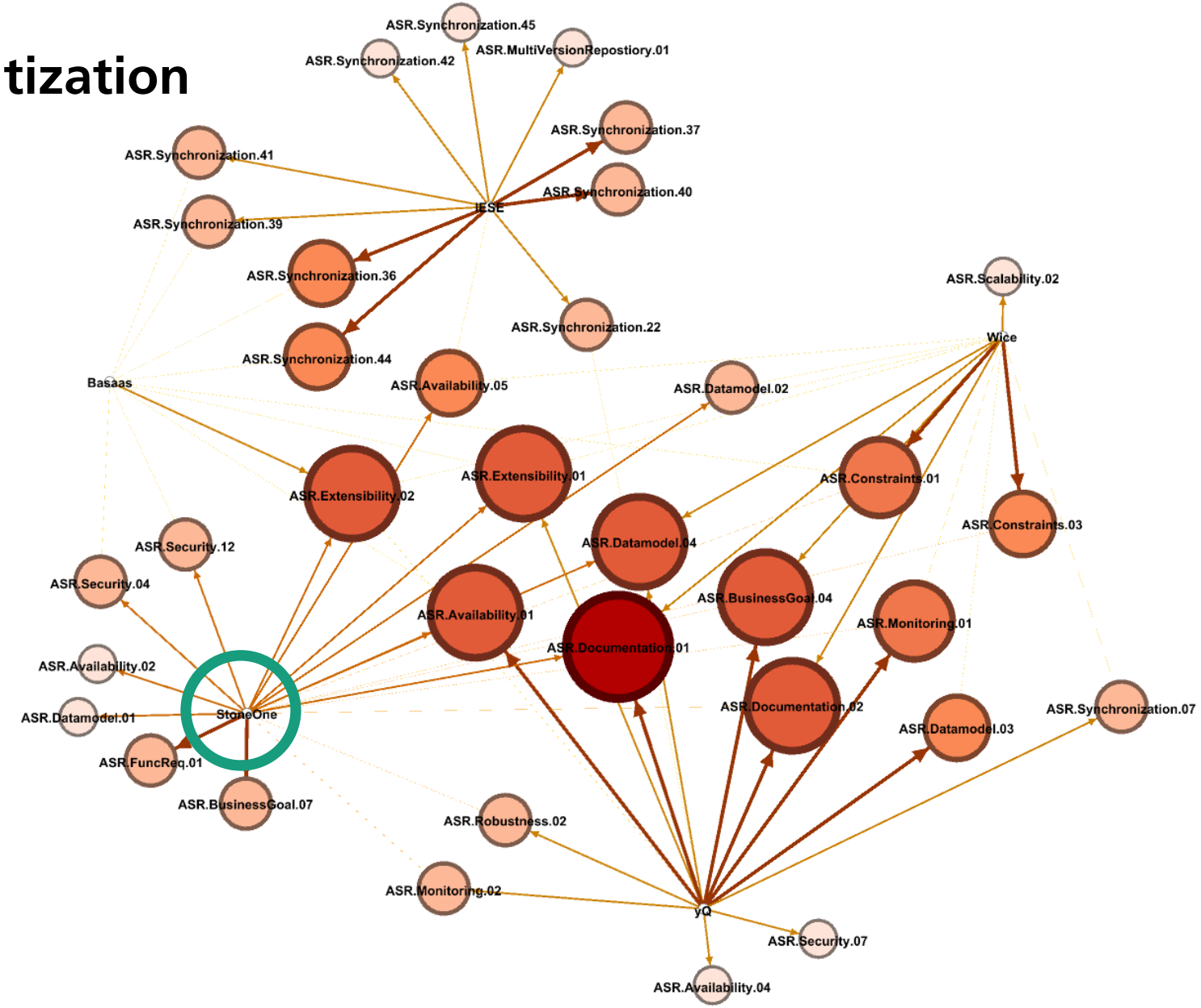
Overall Prioritization



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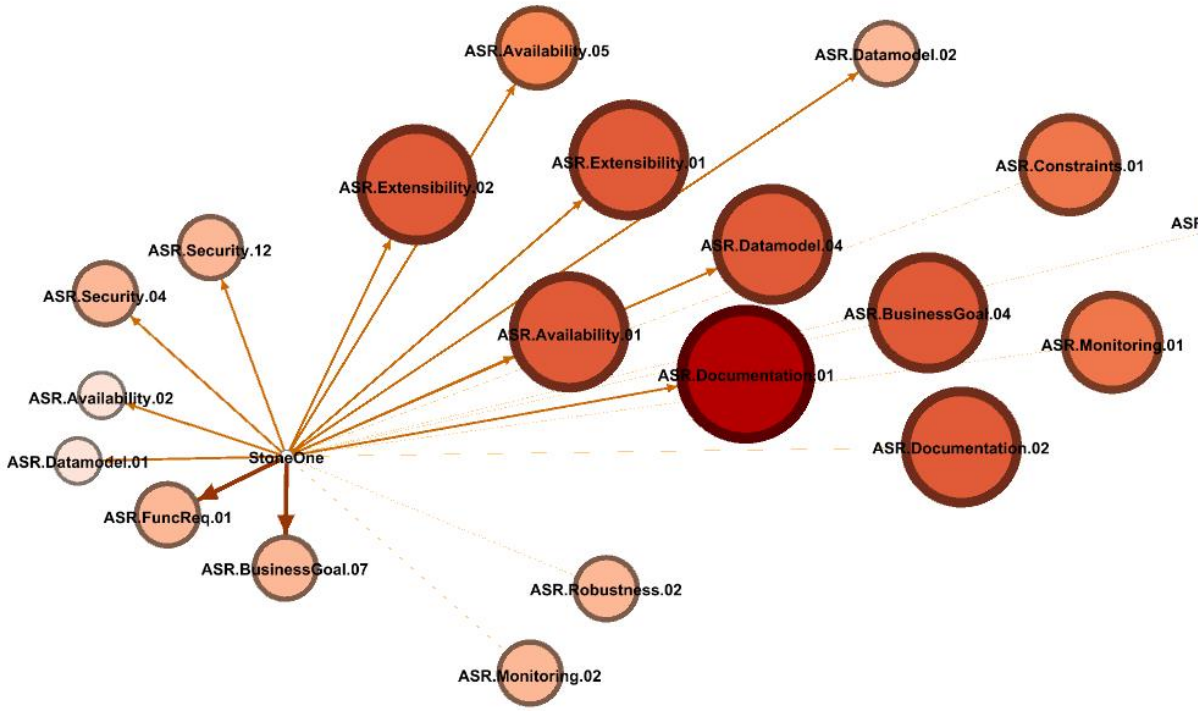
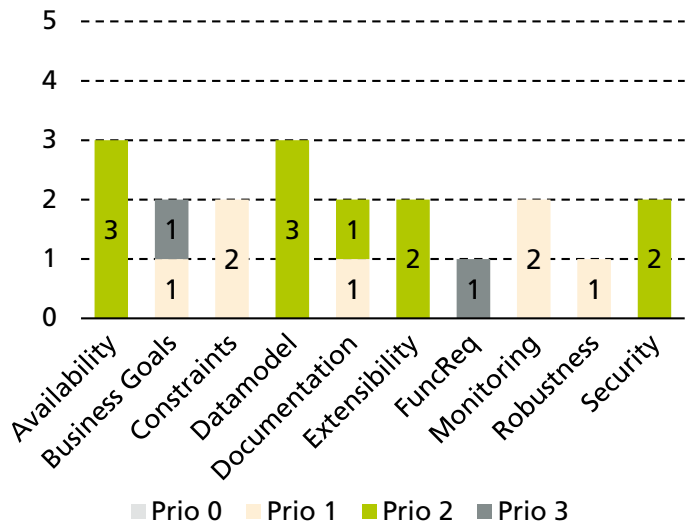
Overall Prioritization
Stone One



- 31 scenarios rated
  - 18 with priority 1
  - 11 with priority 2
  - 2 with priority 3
  - 20 scenarios are covered



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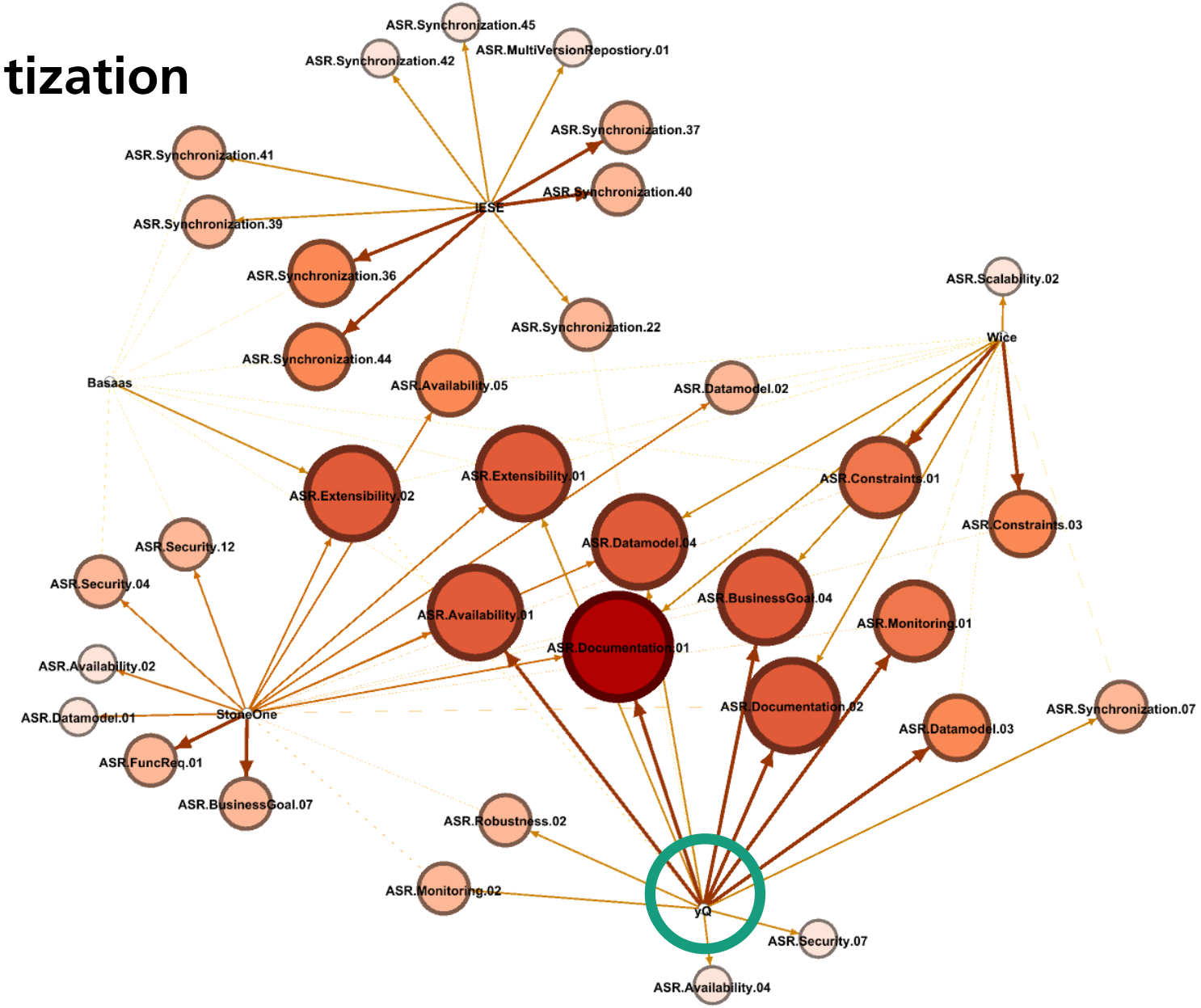
Overall Prioritization



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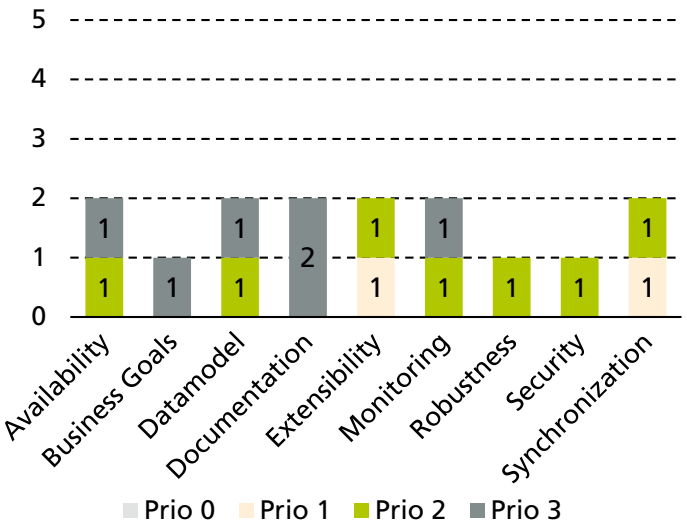
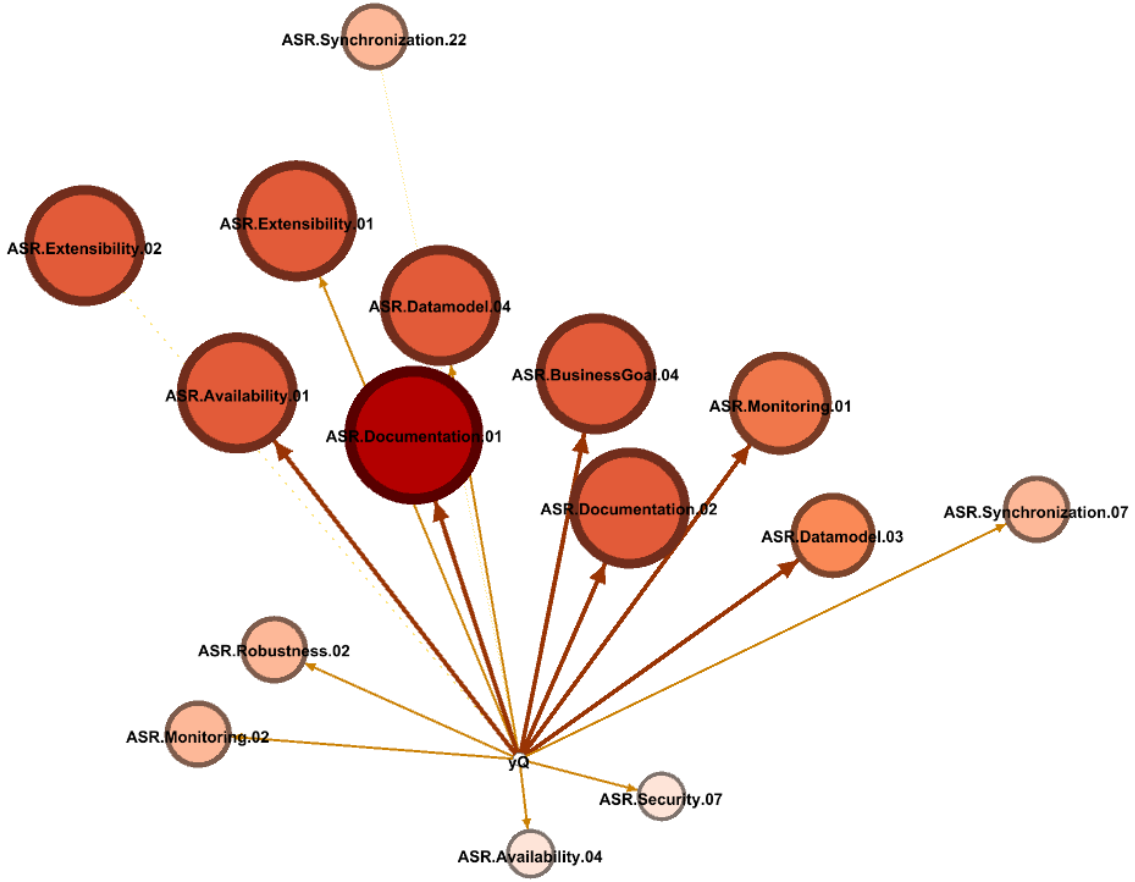
Overall Prioritization yQ

- 27 scenarios rated
  - 14 with priority 1
  - 7 with priority 2
  - 6 with priority 3
  - 15 scenarios are covered





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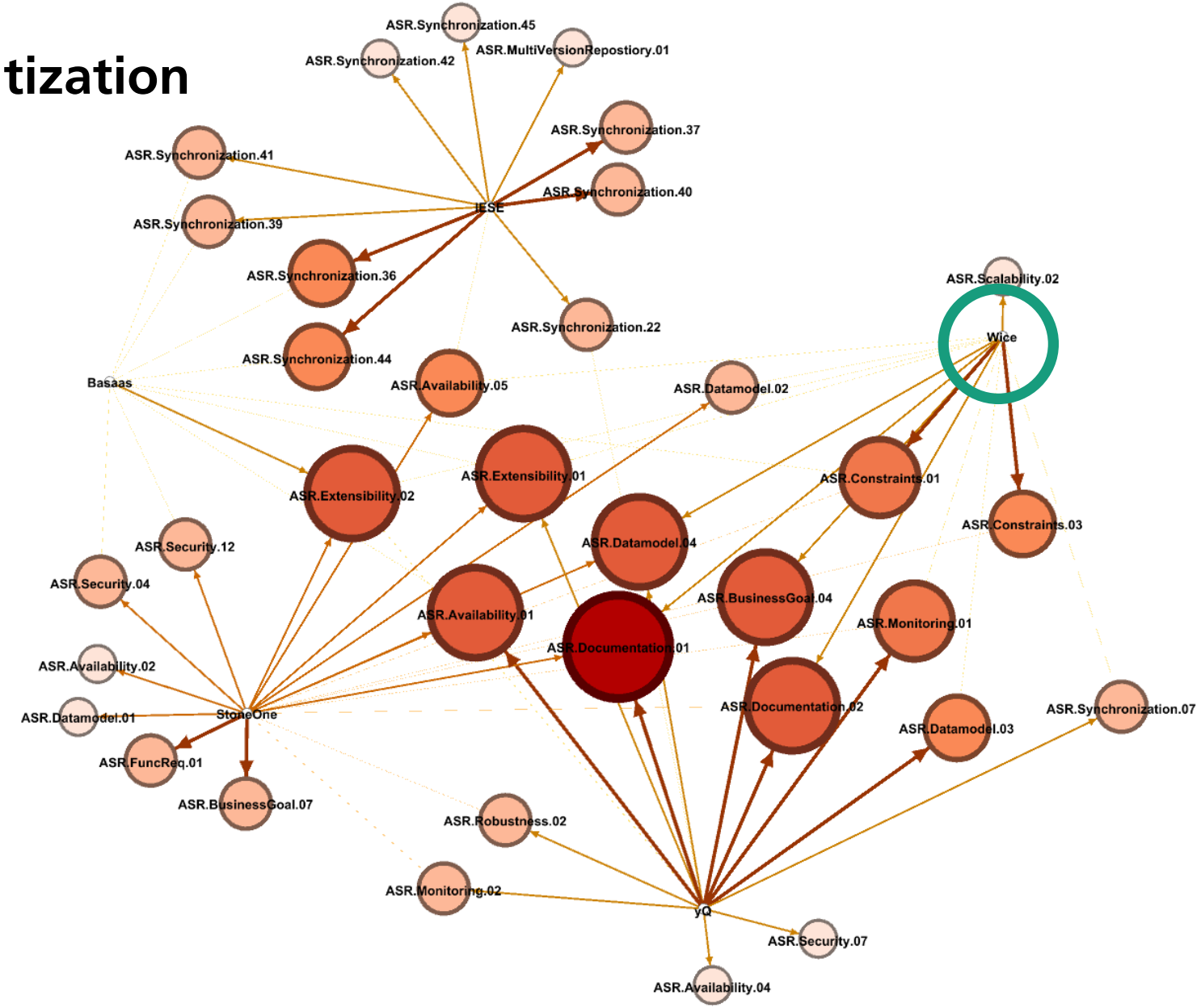
Overall Prioritization



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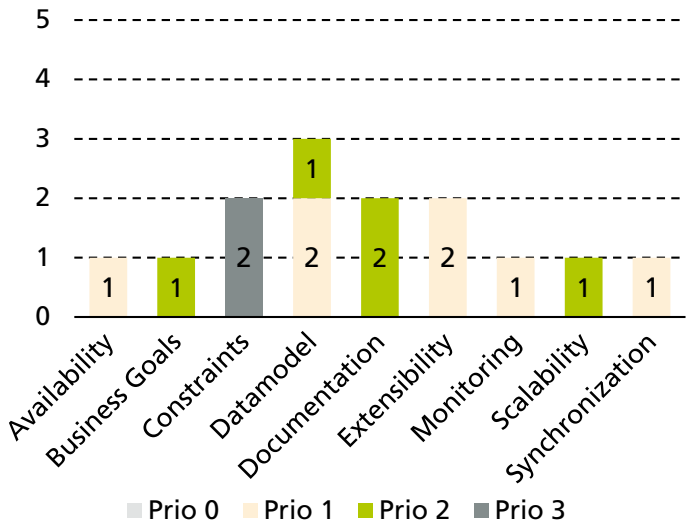
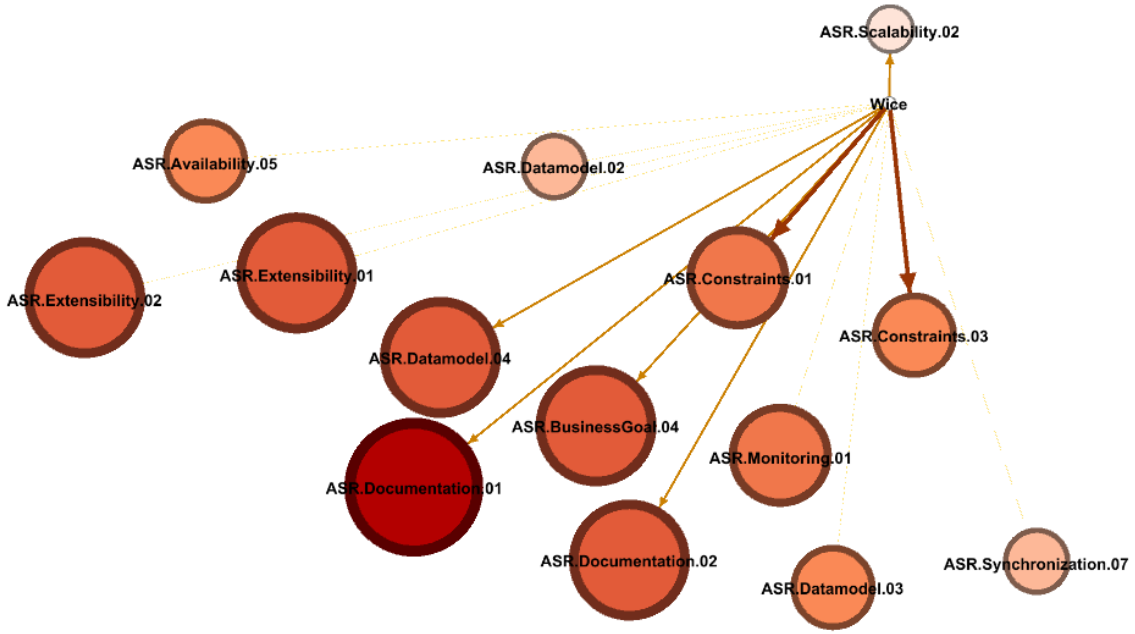
Overall Prioritization Wice

- 37 scenarios rated
  - 30 with priority 1
  - 5 with priority 2
  - 2 with priority 3
  - 14 scenarios are covered





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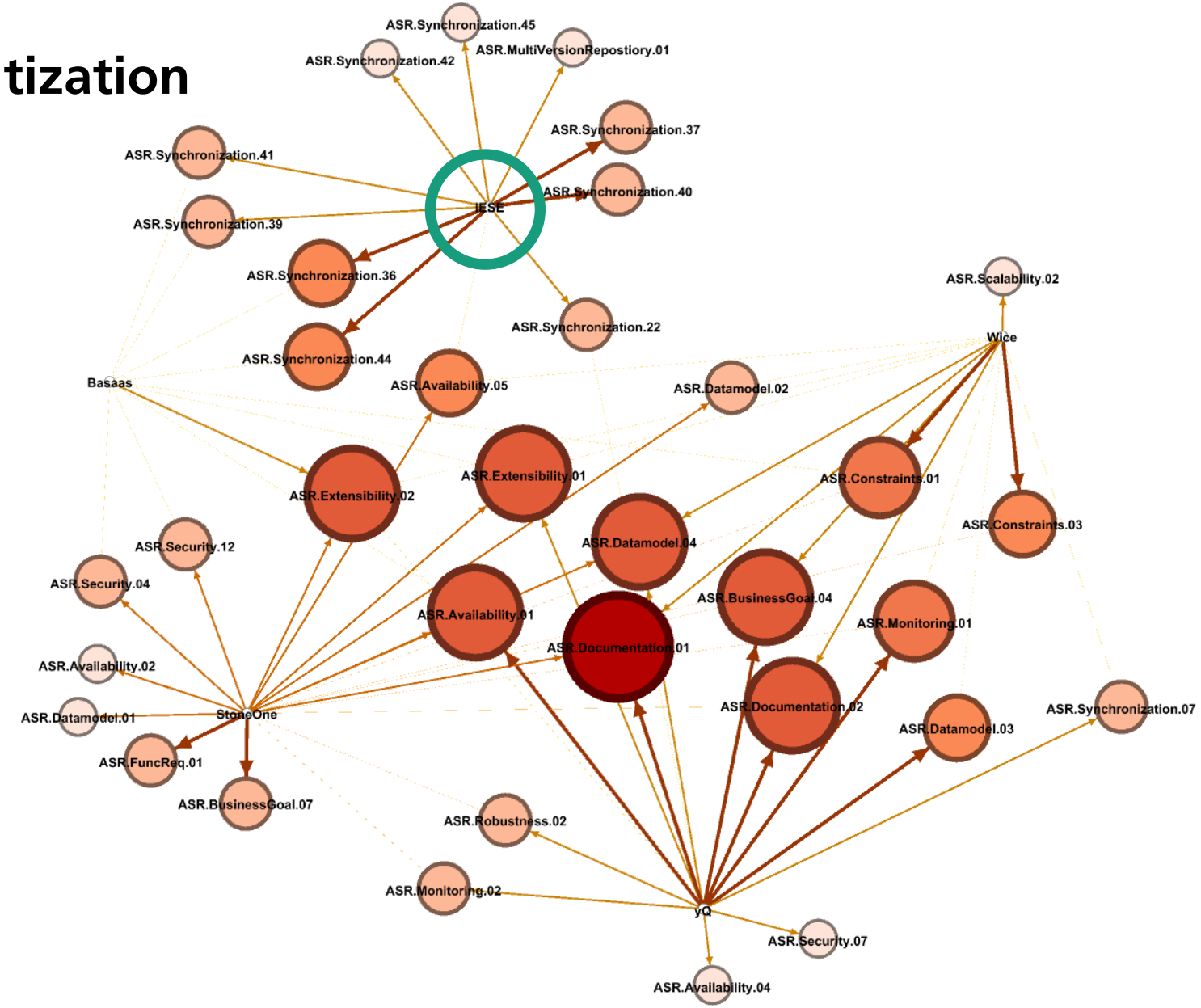
Overall Prioritization



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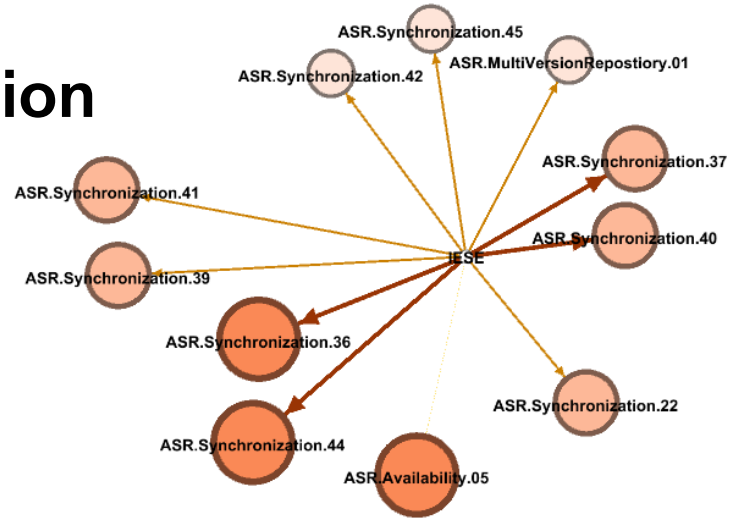
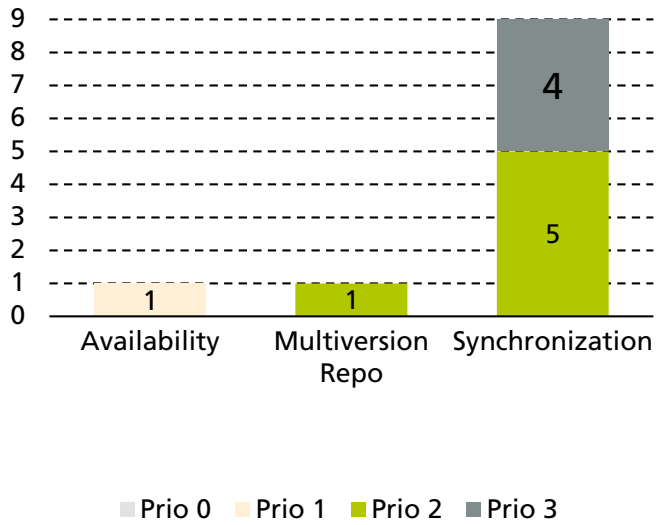
Overall Prioritization IESE



- 32 scenarios rated
  - 22 with priority 1
  - 6 with priority 2
  - 4 with priority 3
  - 11 scenarios are covered



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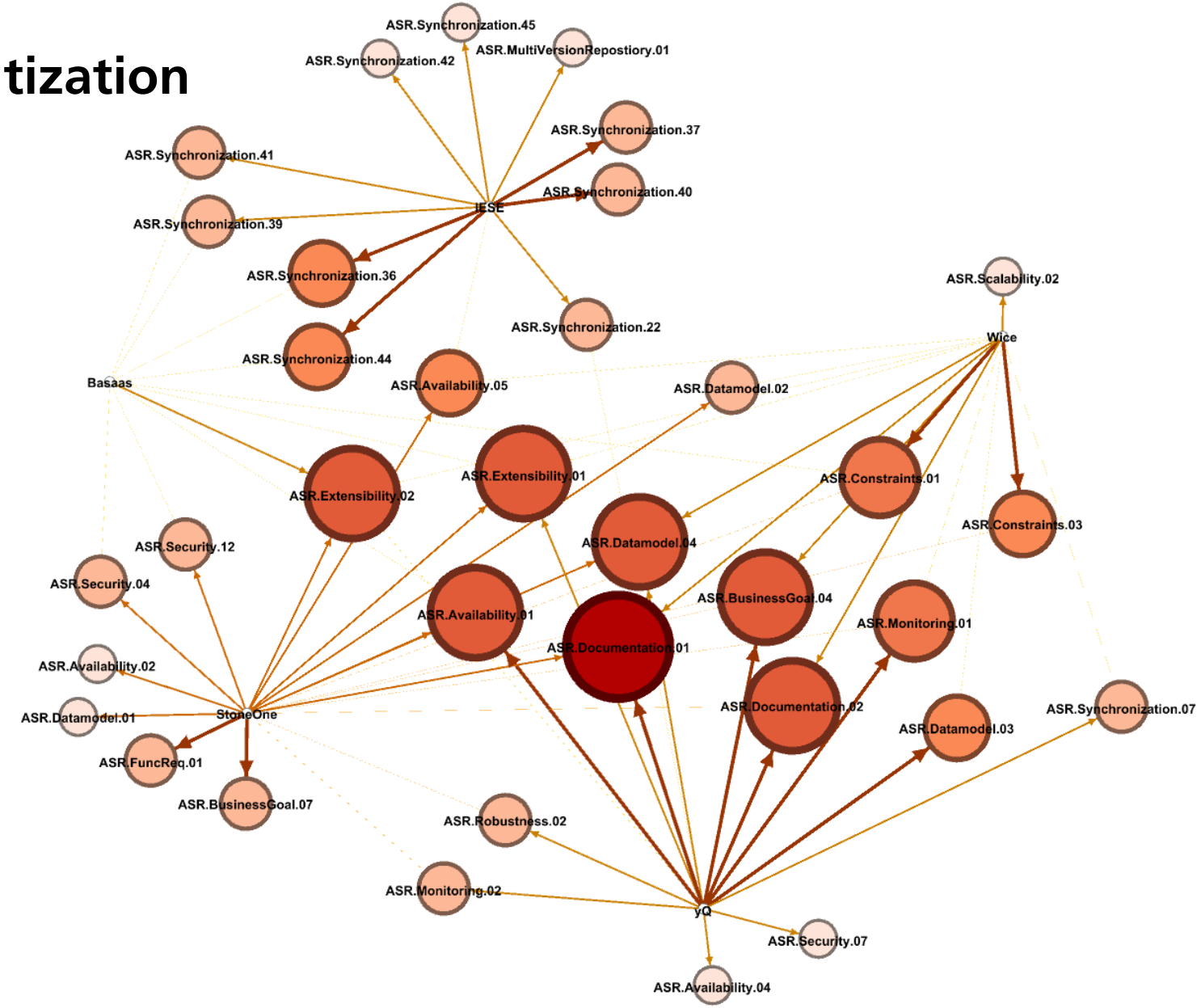
Overall Prioritization



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Overall Prioritization: Additional Scenarios (Partner Priority $\geq$ 2)

- Priority 2 (Cumulative Priority = 2)
  - Mutliversion Repository (ASR.MultiVersionRepostiory.01)
  - Availability of Semantic Context Information (ASR.Synchronization.42)
  - Support for operation metadata (ASR.Synchronization.45)
  - Number of ISVs (ASR.Scalability.02)
  - Update Buffering (ASR.Availability.04)
  - ISV-Specific Rights Management (ASR.Security.07)
  - Automatic Restart (ASR.Availability.02)
  - Organizational Information (ASR.Datamodel.01)

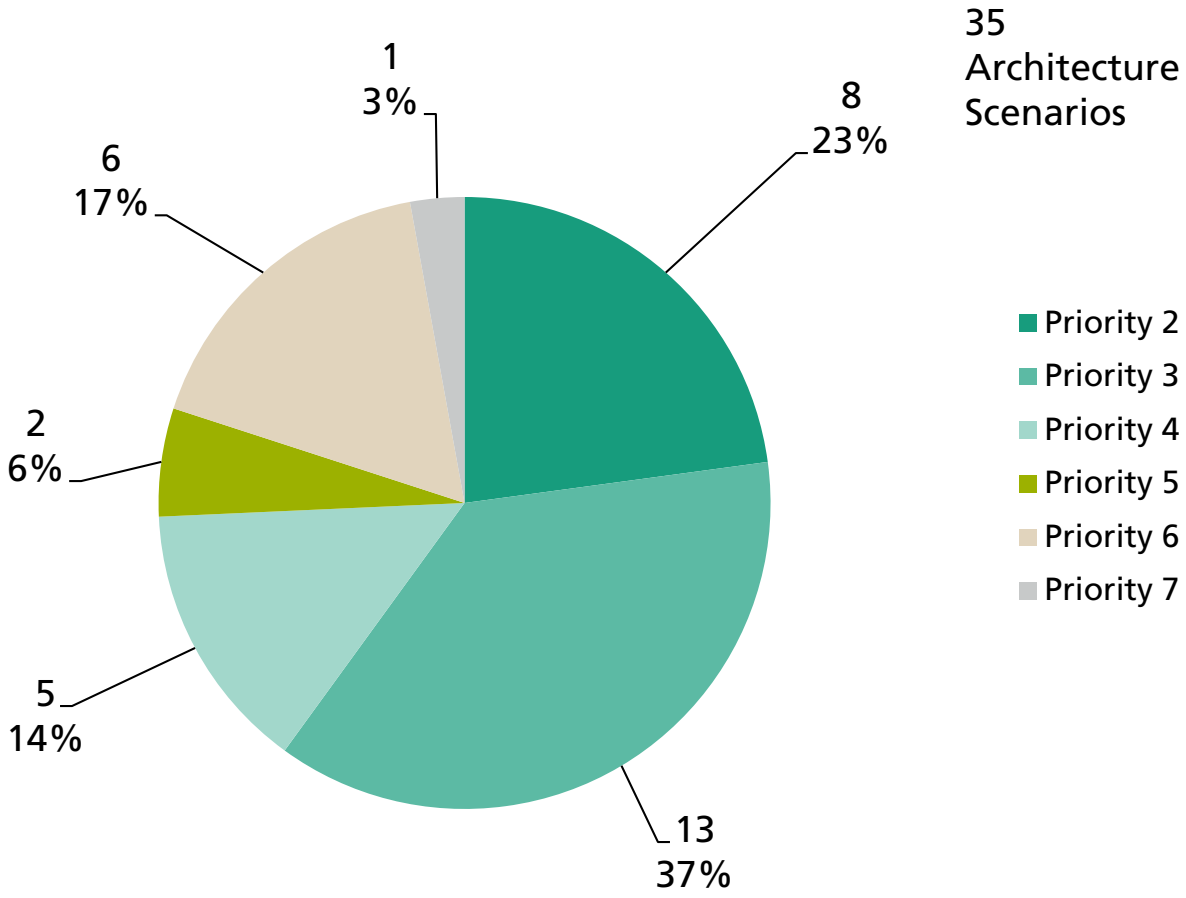
Overall Prioritization: Additional Scenarios (Partner Priority $\geq$ 2)

- Priority 2 (Cumulative Priority = 3)
  - Selective Updates (ASR.Synchronization.22)
  - Support for data item metadata (ASR.Synchronization.39)
  - Support for Syntactic Conflict Resolution (ASR.Synchronization.41)
  - 1 to n Synchronization (ASR.Synchronization.07)
  - Mandatory and Optional Attributes (ASR.Datamodel.02)
  - Health Checks (ASR.Monitoring.02)
  - App Buffering (ASR.Robustness.02)
  - Single-Sign-On (ASR.Security.04)
  - User Management (ASR.Security.12)

Overall Prioritization: Additional Scenarios (Partner Priority $\geq$ 2)

- Priority 3 (Cumulative Priority = 3)
  - Support for synchronization of CRUD operations (ASR.Synchronization.37)
  - Support for asynchronous synchronization (Platform) (ASR.Synchronization.40)
  - Tenant-Specific Data Models (ASR.BusinessGoal.07)
  - Multitenant Capability (ASR.FuncReq.01)

Overall Prioritization : Top 35 Scenarios



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Conclusion

- Large overlaps between the individual partners in top-rated scenarios
- Currently, no contradictory scenarios among the top 35 architectural scenarios identifiable
- Backwards compatibility (ASR.Datamodel.04; Prio 6) and extensibility of the data model (ASR.Extensibility.01; Prio 6) depend on each other, but everyone involved is aware of this
- We focus on the top 35 architecure scenarios, but keep the others in mind

Next Steps

- Architecture Sketches / Drafts
- Architectural Design

Kontakt

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