

Skill Area and Skill Proficiency

(6) IT Specialist

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Skill Area

Job career: IT Specialist

Skill Area of IT Specialist

	Specialty Field	Skill Item
Career common skill item	All Specialty Field	<ul style="list-style-type: none"> ●Technology Latest technology trends, Computer systems, Platform technologies, System management technologies, Techniques for system management, Database technologies, Network technologies, Programming languages, Internet technologies, System development, etc. ●Design Understanding and utilization of modeling techniques, Design techniques, Design of database, middleware and distributed computing, Development environment design, Definition of requirements, etc. ●Software Engineering Programming techniques, Test techniques, Development support tools, Development techniques, Reutilization techniques, Object-oriented development, Techniques for solving technical problems, Security and privacy, etc. ●Analytical of Business applications Analytical of business application requirements, Analytical of technical requirements, Formulation of systematization strategies, Definitions of platform requirements, Verification of system values, Computerization and management, Industrial knowledge, Generic business application, etc. ●Utilization of consulting techniques Selection and utilization of consulting techniques, Understanding and utilization of analytical tools and models. <ul style="list-style-type: none"> ●Knowledge Management and Utilization Management and utilization of intellectual properties ●Project Management Project Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management ●Leadership Leadership ●Communication 2Way communication, Distribution of information, Organization and analytical and retrieval of information ●Negotiation Negotiation
Specialty Field specific skill item	Platform	<ul style="list-style-type: none"> ●Construction of System Platforms Techniques for design of platform system, Test techniques, Installation and migration plans, Problem management, Performance management, Capacity management, Change Control, Resources management, Systematization plans, etc.
	System management	<ul style="list-style-type: none"> ●Construction of Functions for System Operation Management Policies for system operation management, Design of system operation management, System management plans, Resources management, Failure management, Test techniques, System evaluation on operation, System maintenance, Customer service, etc.
	Database	<ul style="list-style-type: none"> ●Database construction Database related technology trends, Relational model, SQL, Database management system, Techniques for design of data structure, Physical database design, Capacity management, etc.
	Network	<ul style="list-style-type: none"> ●Network construction Network technology trends, Network standards, Network modeling techniques, Knowledge of network products, Network construction, Operation, maintenance, and management of network systems, etc.
	Distributed computing	<ul style="list-style-type: none"> ●Construction of Distributed Computing Systems Middleware technologies, Techniques for data placement, Application execution methods, Server technologies, Techniques for server deployment, Design of distributed computing systems, Implementation of security system etc.
	Security	<ul style="list-style-type: none"> ●Construction of Security Functions Consulting, Security and personal information, Security technology trends, Implementation design and inspection of security systems, Threats to corporate systems, Social environments, etc.

Skill Proficiency/Knowledge Items

Job career: IT Specialist

Specialty Field: Platform

Specialty Field:

Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Technology</p> <p>[Knowledge Items]</p> <div> <ul style="list-style-type: none"> -Latest technology trends -Latest IT market trends -Computer science fundamentals -Computer systems -Understanding and utilization of computer system architectures and fundamental technologies -System platform technologies -Platform technologies -Middleware technologies -Database technologies -Basic functions of relational database management systems -Relationship between transaction processing and synchronization points of DB -Understanding and utilization of network technologies -Internet technologies -System management technologies -Programming languages, Markup languages -Data modeling -Database design -Database operation design -Techniques for system management -Application security <ul style="list-style-type: none"> -System configuration -System development and maintenance -System development environment </div>	Level 7	
	Level 6	Able to lead the selection of technologies based on the latest technology trends, and to make plans for the system platform framework design, development, and installation methodology, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead a technical team about highly complex technical problems.
	Level 5	Able to lead the selection of technologies based on the latest technology trends, to practice solving of highly complex technical problems, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the selection of technologies based on the latest technology trends, and to practice solving of highly complex technical problems, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the selection of technologies based on the latest technology trends, and to practice technical problems solving, as a member of technical team, in the assigned area.

Specialty Field:
Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Design</p> <p>[Knowledge Items]</p> <p>-Understanding and utilization of modeling techniques</p> <p>-Design techniques</p> <p>-Design of database, middleware and distributed computing</p> <p>-Design of development environment</p> <p>-Requirements definition</p>	Level 7	
	Level 6	Able to lead the system platform design, by leading technical team about highly complex system, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to lead the system platform design and technical team about highly complex design, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the system platform design, and to carry out highly complex design, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the platform design, as a member of technical team in the assigned area.

Specialty Field:

Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Software Engineering</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Development techniques -Design techniques -External design -Internal design -Program design -Programming techniques -Test techniques -Development support tools -Object-oriented development -Reutilization techniques -Utilization of verification techniques -Implementation and inspection of security systems -Techniques for solving technical problems -Utilization and practice of techniques for technical verification -Standardization -Security and privacy -System audit 	Level 7	
	Level 6	Able to perform work, by leading technical team, on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform work, by carrying out technical guidance for the technical team on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform work, by giving advice to less-experienced members on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to practice work, by using software engineering technology as a member of technical team in the assigned area.

Specialty Field:

Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Analytical of Business applications</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Analytical of business application requirements -Analytical of technical requirements -Formulation of systematization strategies -Requirements definition of platform -Verification of system values -Informatization and management -Industry knowledge -General-purpose application contents -Latest general-purpose application trends 	Level 7	
	Level 6	Able to carry out analytical of complex and advanced business application and technical requirements, based on long term perspective on industry and technical trends, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out analytical of business application and technical requirements, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out analytical of business application and technical requirements, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out analytical of business application and technical requirements, as a member of technical team in the assigned area.

Specialty Field:
Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Utilization of consulting techniques</p> <p>[Knowledge Items]</p> <p>-Selection and adaptation of consulting techniques</p> <p>-Understanding and utilization of analytical tools and models</p>	Level 7	
	Level 6	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by using consulting methods, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project, by using consulting methods, as a member of technical team.

Specialty Field:

Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Knowledge Management and Utilization</p> <p>[Knowledge Items]</p> <p>-Management and utilization of intellectual properties</p>	Level 7	
	Level 6	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project effectively and with high quality, by carrying out creation database from intellectual property, and its utilization, maintenance, and management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management as a member of technical team.

Specialty Field:

Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Project Management</p> <p>[Knowledge Items]</p> <p>-Project Integration Management -Project Scope Management -Project Time Management -Project Cost Management -Project Quality Management -Project Human Resource Management -Project Communications Management -Project Risk Management -Project Procurement Management</p>	Level 7	
	Level 6	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project by plan formulation of project, implementation of plan and change management as a member of technical team, in the assigned area.

Specialty Field:
Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Leadership</p> <p>[Knowledge Items]</p> <p>-Leadership</p>	Level 7	
	Level 6	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by issuing instructions and orders as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to participate as a member of technical team in the assigned area.

Specialty Field:

Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Communication</p> <p>[Knowledge Items]</p> <p>-2-Way communication -Distribution of information -Organization, analytical, and retrieval of information</p>	Level 7	
	Level 6	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 5	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 4	Able to perform the project by keeping good communication with project members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to facilitate proper team communication, by understanding the project team status accurately, as a member of technical team.

Specialty Field:
Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Negotiation</p> <p>[Knowledge Items]</p> <p>-Negotiation</p>	Level 7	
	Level 6	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to make an agreement on technical issues with project team members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to obtain required information and data for the project through negotiation, by understanding the project team status accurately, as a member of technical team.

Specialty Field:
Platform

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Specialty Field specific skill item]</p> <p>●Construction of System Platforms</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Techniques for design of platform system -Test techniques -Installation and migration plans -Problem management -Performance management, capacity management -Change Control -Resources management -Systematization plans -Techniques for system evaluation -Platform technologies -Requirements definition of platform -Techniques for dealing with failure -Product knowledge (platforms) 	Level 7	
	Level 6	Able to lead system platform construction, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead technical team about construction of highly complex system platform.
	Level 5	Able to lead system platform construction, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, be able to carry out technical guidance for the technical team about construction of highly complex system platform.
	Level 4	Able to lead system platform construction, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out system platform construction as a member of technical team in the assigned area.

Skill Proficiency/Knowledge Items

Job career: IT Specialist

Specialty Field: System management

Specialty Field:

System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Technology</p> <p>[Knowledge Items]</p> <div> <ul style="list-style-type: none"> -Latest technology trends -Latest IT market trends -Computer science fundamentals -Computer systems -Understanding and utilization of computer system architectures and fundamental technologies -System platform technologies -Platform technologies -Middleware technologies -Database technologies -Basic functions of relational database management systems -Relationship between transaction processing and synchronization points of DB -Understanding and utilization of network technologies -Internet technologies -System management technologies -Programming languages, Markup languages -Data modeling -Database design -Database operation design -Techniques for system management -Application security <ul style="list-style-type: none"> -System configuration -System development and maintenance -System development environment </div>	Level 7	
	Level 6	Able to lead the selection of technologies based on the latest technology trends, and to make plans for the system operation management framework design, development, and installation methodology, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead a technical team about highly complex technical problems.
	Level 5	Able to lead the selection of technologies based on the latest technology trends, to practice solving of highly complex technical problems, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the selection of technologies based on the latest technology trends, and to practice solving of highly complex technical problems, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the selection of technologies based on the latest technology trends, and to practice technical problems solving, as a member of technical team, in the assigned area.

Specialty Field:
System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Design</p> <p>[Knowledge Items]</p> <p>-Understanding and utilization of modeling techniques</p> <p>-Design techniques</p> <p>-Design of database, middleware and distributed computing</p> <p>-Design of development environment</p> <p>-Requirements definition</p>	Level 7	
	Level 6	Able to lead the system operation management design and leads technical team about highly complex system, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to lead the system operation management design and technical team about highly complex design, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the system operation management design, and to carry out highly complex design, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the system operation management design, as a member of technical team in the assigned area.

Specialty Field:

System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Software Engineering</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Development techniques -Design techniques -External design -Internal design -Program design -Programming techniques -Test techniques -Development support tools -Object-oriented development -Reutilization techniques -Utilization of verification techniques -Implementation and inspection of security systems -Techniques for solving technical problems -Utilization and practice of techniques for technical verification -Standardization -Security and privacy -System audit 	Level 7	
	Level 6	Able to perform work, by leading technical team, on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform work, by carrying out technical guidance for the technical team on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform work, by giving advice to less-experienced members on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to practice work, by using software engineering technology as a member of technical team in the assigned area.

Specialty Field:

System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Analytical of Business applications</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Analytical of business application requirements -Analytical of technical requirements -Formulation of systematization strategies -Requirements definition of platform -Verification of system values -Informatization and management -Industry knowledge -General-purpose application contents -Latest general-purpose application trends 	Level 7	
	Level 6	Able to carry out analytical of complex and advanced business application and technical requirements, based on long term perspective on industry and technical trends, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out analytical of business application and technical requirements, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out analytical of business application and technical requirements, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out analytical of business application and technical requirements, as a member of technical team in the assigned area.

Specialty Field:

System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Utilization of consulting techniques</p> <p>[Knowledge Items]</p> <p>-Selection and adaptation of consulting techniques</p> <p>-Understanding and utilization of analytical tools and models</p>	Level 7	
	Level 6	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by using consulting methods, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project, by using consulting methods, as a member of technical team.

Specialty Field:

System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Knowledge Management and Utilization</p> <p>[Knowledge Items]</p> <p>-Management and utilization of intellectual properties</p>	Level 7	
	Level 6	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project effectively and with high quality, by carrying out creation database from intellectual property, and its utilization, maintenance, and management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management as a member of technical team.

Specialty Field:

System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Project Management</p> <p>[Knowledge Items]</p> <p>-Project Integration Management -Project Scope Management -Project Time Management -Project Cost Management -Project Quality Management -Project Human Resource Management -Project Communications Management -Project Risk Management -Project Procurement Management</p>	Level 7	
	Level 6	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project by plan formulation of project, implementation of plan and change management as a member of technical team, in the assigned area.

Specialty Field:
System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Leadership</p> <p>[Knowledge Items]</p> <p>-Leadership</p>	Level 7	
	Level 6	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by issuing instructions and orders as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to participate as a member of technical team in the assigned area.

Specialty Field:

System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Communication</p> <p>[Knowledge Items]</p> <p>-2-Way communication -Distribution of information -Organization, analytical, and retrieval of information</p>	Level 7	
	Level 6	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 5	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 4	Able to perform the project by keeping good communication with project members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to facilitate proper team communication, by understanding the project team status accurately, as a member of technical team.

Specialty Field:
System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Negotiation</p> <p>[Knowledge Items]</p> <p>-Negotiation</p>	Level 7	
	Level 6	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to make an agreement on technical issues with project team members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to obtain required information and data for the project through negotiation, by understanding the project team status accurately, as a member of technical team.

Specialty Field:

System management

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Specialty Field specific skill item]</p> <p>●Construction of Functions for System Operation Management</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Policies for system operation management -Design of system operation management -System management plans -Resources management -Failure management -Performance management -Test techniques -Installation and migration plans -New system development and system migration -System evaluation on operation -System maintenance -Customer service 	Level 7	
	Level 6	Able to lead construction of system operation management functions, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead technical team about construction of highly complex system operation management function.
	Level 5	Able to lead construction of system operation management functions, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out technical guidance for the technical team about construction of highly complex system operation management function.
	Level 4	Able to lead construction of system operation management functions, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out construction of system operation management functions as a member of technical team in the assigned area.

Skill Proficiency/Knowledge Items

Job career: IT Specialist

Specialty Field: Database

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Technology</p> <p>[Knowledge Items]</p> <div> <ul style="list-style-type: none"> -Latest technology trends -Latest IT market trends -Computer science fundamentals -Computer systems -Understanding and utilization of computer system architectures and fundamental technologies -System platform technologies -Platform technologies -Middleware technologies -Database technologies -Basic functions of relational database management systems -Relationship between transaction processing and synchronization points of DB -Understanding and utilization of network technologies -Internet technologies -System management technologies -Programming languages, Markup languages -Data modeling -Database design -Database operation design -Techniques for system management -Application security <ul style="list-style-type: none"> -System configuration -System development and maintenance -System development environment </div>	Level 7	
	Level 6	Able to lead the selection of technologies based on the latest technology trends, and to make plans for the database framework design, development, and installation methodology, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead a technical team about highly complex technical problems.
	Level 5	Able to lead the selection of technologies based on the latest technology trends, to practice solving of highly complex technical problems, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the selection of technologies based on the latest technology trends, and to practice solving of highly complex technical problems, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the selection of technologies based on the latest technology trends, and to practice technical problems solving, as a member of technical team, in the assigned area.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Design</p> <p>[Knowledge Items]</p> <p>-Understanding and utilization of modeling techniques</p> <p>-Design techniques</p> <p>-Design of database, middleware and distributed computing</p> <p>-Design of development environment</p> <p>-Requirements definition</p>	Level 7	
	Level 6	Able to lead the database design and leads technical team about highly complex system, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to lead the database design and technical team about highly complex design, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the database design, and to carry out highly complex design, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the database design, as a member of technical team in the assigned area.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Software Engineering</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Development techniques -Design techniques -External design -Internal design -Program design -Programming techniques -Test techniques -Development support tools -Object-oriented development -Reutilization techniques -Utilization of verification techniques -Implementation and inspection of security systems -Techniques for solving technical problems -Utilization and practice of techniques for technical verification -Standardization -Security and privacy -System audit 	Level 7	
	Level 6	Able to perform work, by leading technical team, on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform work, by carrying out technical guidance for the technical team on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform work, by giving advice to less-experienced members on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to practice work, by using software engineering technology as a member of technical team in the assigned area.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Analytical of Business applications</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Analytical of business application requirements -Analytical of technical requirements -Formulation of systematization strategies -Requirements definition of platform -Verification of system values -Informatization and management -Industry knowledge -General-purpose application contents -Latest general-purpose application trends 	Level 7	
	Level 6	Able to carry out analytical of complex and advanced business application and technical requirements, based on long term perspective on industry and technical trends, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out analytical of business application and technical requirements, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out analytical of business application and technical requirements, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out analytical of business application and technical requirements, as a member of technical team in the assigned area.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Utilization of consulting techniques</p> <p>[Knowledge Items]</p> <p>-Selection and adaptation of consulting techniques</p> <p>-Understanding and utilization of analytical tools and models</p>	Level 7	
	Level 6	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by using consulting methods, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project, by using consulting methods, as a member of technical team.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Knowledge Management and Utilization</p> <p>[Knowledge Items]</p> <p>-Management and utilization of intellectual properties</p>	Level 7	
	Level 6	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project effectively and with high quality, by carrying out creation database from intellectual property, and its utilization, maintenance, and management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management as a member of technical team.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Project Management</p> <p>[Knowledge Items]</p> <p>-Project Integration Management -Project Scope Management -Project Time Management -Project Cost Management -Project Quality Management -Project Human Resource Management -Project Communications Management -Project Risk Management -Project Procurement Management</p>	Level 7	
	Level 6	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project by plan formulation of project, implementation of plan and change management as a member of technical team, in the assigned area.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
[Career common skill item] ●Leadership [Knowledge Items] -Leadership	Level 7	
	Level 6	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by issuing instructions and orders as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to participate as a member of technical team in the assigned area.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Communication</p> <p>[Knowledge Items]</p> <p>-2-Way communication -Distribution of information -Organization, analytical, and retrieval of information</p>	Level 7	
	Level 6	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 5	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 4	Able to perform the project by keeping good communication with project members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to facilitate proper team communication, by understanding the project team status accurately, as a member of technical team.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Negotiation</p> <p>[Knowledge Items]</p> <p>-Negotiation</p>	Level 7	
	Level 6	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to make an agreement on technical issues with project team members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to obtain required information and data for the project through negotiation, by understanding the project team status accurately, as a member of technical team.

Specialty Field:

Database

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Specialty Field specific skill item]</p> <p>●Database construction</p> <p>[Knowledge Items]</p> <div> <div> <ul style="list-style-type: none"> -Database related technology trends -Important technology in database development -Peripheral technology of databases -Relational model -SQL -Basic functions of relational database management systems -Database management system -Selection of database management systems (DBMS) -Installation of database management systems (DBMS) -Techniques for design of data structure -Overall plans for databases -Requirements definition of database -Preparation of database design -Design of physical databases -Creation of logical data models -Test techniques -Installation and migration plans -Database construction -Storage management plans -Capacity management </div> <div> <ul style="list-style-type: none"> -Operation and management of database systems </div> </div>	Level 7	
	Level 6	Able to lead database construction, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead technical team about construction of highly complex database.
	Level 5	Able to lead database construction, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out technical guidance for the technical team about construction of highly complex database.
	Level 4	Able to lead database construction, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out database construction as a member of technical team in the assigned area.

Skill Proficiency/Knowledge Items

Job career: IT Specialist

Specialty Field: Network

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Technology</p> <p>[Knowledge Items]</p> <div> <ul style="list-style-type: none"> -Latest technology trends -Latest IT market trends -Computer science fundamentals -Computer systems -Understanding and utilization of computer system architectures and fundamental technologies -System platform technologies -Platform technologies -Middleware technologies -Database technologies -Basic functions of relational database management systems -Relationship between transaction processing and synchronization points of DB -Understanding and utilization of network technologies -Internet technologies -System management technologies -Programming languages, Markup languages -Data modeling -Database design -Database operation design -Techniques for system management -Application security <ul style="list-style-type: none"> -System configuration -System development and maintenance -System development environment </div>	Level 7	
	Level 6	Able to lead the selection of technologies based on the latest technology trends, and to make plans for the network framework design, development, and installation methodology, as a responsible person of technical team in large-scale network with 300 nodes or more. In addition, able to lead a technical team about highly complex technical problems. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to lead the selection of technologies based on the latest technology trends, to practice solving of highly complex technical problems, and to carry out technical guidance for the technical team, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to lead the selection of technologies based on the latest technology trends, and to practice solving of highly complex technical problems and to provide technical guidance for the technical team, as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to carry out the selection of technologies based on the latest technology trends, and to practice technical problems solving, as a member of technical team, in the assigned area.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Design</p> <p>[Knowledge Items]</p> <p>-Understanding and utilization of modeling techniques</p> <p>-Design techniques</p> <p>-Design of database, middleware and distributed computing</p> <p>-Design of development environment</p> <p>-Requirements definition</p>	Level 7	
	Level 6	Able to lead the network design and leads technical team about highly complex system, as a responsible person of technical team in large-scale network with 300 nodes or more. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to lead the network design and technical team about highly complex design, and to carry out technical guidance for the technical team, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to lead the network design, and to carry out highly complex design, as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to carry out the network design, as a member of technical team in the assigned area.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Software Engineering</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Development techniques -Design techniques -External design -Internal design -Program design -Programming techniques -Test techniques -Development support tools -Object-oriented development -Reutilization techniques -Utilization of verification techniques -Implementation and inspection of security systems -Techniques for solving technical problems -Utilization and practice of techniques for technical verification -Standardization -Security and privacy -System audit 	Level 7	
	Level 6	Able to perform work, by leading technical team, on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in large-scale network with 300 nodes or more. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to perform work, by carrying out technical guidance for the technical team on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to perform work, by giving advice to less-experienced members on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to practice work, by using software engineering technology as a member of technical team in the assigned area.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Analytical of Business applications</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Analytical of business application requirements -Analytical of technical requirements -Formulation of systematization strategies -Requirements definition of platform -Verification of system values -Informatization and management -Industry knowledge -General-purpose application contents -Latest general-purpose application trends 	Level 7	
	Level 6	Able to carry out analytical of complex and advanced business application and technical requirements, based on long term perspective on industry and technical trends, as a responsible person of technical team in large-scale network with 300 nodes or more. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to carry out analytical of business application and technical requirements, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to carry out analytical of business application and technical requirements, as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to carry out analytical of business application and technical requirements, as a member of technical team in the assigned area.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Utilization of consulting techniques</p> <p>[Knowledge Items]</p> <p>-Selection and adaptation of consulting techniques</p> <p>-Understanding and utilization of analytical tools and models</p>	Level 7	
	Level 6	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in large-scale network with 300 nodes or more. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to carry out the project by using consulting methods, as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to carry out the project, by using consulting methods, as a member of technical team.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Knowledge Management and Utilization</p> <p>[Knowledge Items]</p> <p>-Management and utilization of intellectual properties</p>	Level 7	
	Level 6	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management as a member of technical team.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Project Management</p> <p>[Knowledge Items]</p> <p>-Project Integration Management -Project Scope Management -Project Time Management -Project Cost Management -Project Quality Management -Project Human Resource Management -Project Communications Management -Project Risk Management -Project Procurement Management</p>	Level 7	
	Level 6	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in large-scale network with 300 nodes or more. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to carry out the project by plan formulation of project, implementation of plan and change management as a member of technical team, in the assigned area. (Remarks: number of nodes does not include clients and HUBs)

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
[Career common skill item] ●Leadership [Knowledge Items] -Leadership	Level 7	
	Level 6	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in large-scale network with 300 nodes or more. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to carry out the project by issuing instructions and orders as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to participate as a member of technical team in the assigned area.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Communication</p> <p>[Knowledge Items]</p> <p>-2-Way communication -Distribution of information -Organization, analytical, and retrieval of information</p>	Level 7	
	Level 6	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in large-scale network with 300 nodes or more. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to perform the project by keeping good communication as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to facilitate proper team communication, by understanding the project team status accurately, as a member of technical team.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Negotiation</p> <p>[Knowledge Items]</p> <p>-Negotiation</p>	Level 7	
	Level 6	Able to set up a goal with the responsible person on customer side and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in large-scale network with 300 nodes or more. (Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to make an agreement on technical issues with project team members, as a leader of technical team in small-scale network with less than 100 nodes. (Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to obtain required information and data for the project through negotiation, by understanding the project team status accurately, as a member of technical team.

Specialty Field:

Network

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Specialty Field specific skill item]</p> <p>●Network construction</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Network technology trends -Network systems technology trends -Network standards -Network modeling techniques -Knowledge of network products -Understanding and utilization of network technologies -Requirements definition of network systems -Network construction -Operation, maintenance, and management of network systems -Installation and migration of network systems -Evaluation of Network system -Test techniques -Installation and migration plans 	Level 7	
	Level 6	Able to lead network construction, as a responsible person of technical team in large-scale network with 300 nodes or more. In addition, able to lead technical team about construction of highly complex network.(Remarks: number of nodes does not include clients and HUBs)
	Level 5	Able to lead network construction, as a responsible person of technical team in medium-scale network from 100 but less than 300 nodes. In addition, able to carry out technical guidance for the technical team about construction of highly complex network.(Remarks: number of nodes does not include clients and HUBs)
	Level 4	Able to lead network construction, as a leader of technical team in small-scale network with less than 100 nodes.(Remarks: number of nodes does not include clients and HUBs)
	Level 3	Able to carry out network construction as a member of technical team in the assigned area.

Skill Proficiency/Knowledge Items

Job career: IT Specialist

Specialty Field: Distributed computing

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Technology</p> <p>[Knowledge Items]</p> <div> <ul style="list-style-type: none"> -Latest technology trends -Latest IT market trends -Computer science fundamentals -Computer systems -Understanding and utilization of computer system architectures and fundamental technologies -System platform technologies -Platform technologies -Middleware technologies -Database technologies -Basic functions of relational database management systems -Relationship between transaction processing and synchronization points of DB -Understanding and utilization of network technologies -Internet technologies -System management technologies -Programming languages, Markup languages -Data modeling -Database design -Database operation design -Techniques for system management -Application security <ul style="list-style-type: none"> -System configuration -System development and maintenance -System development environment </div>	Level 7	
	Level 6	Able to lead the selection of technologies based on the latest technology trends, and to make plans for the distributed computing framework design, development, and installation methodology, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead a technical team about highly complex technical problems.
	Level 5	Able to lead the selection of technologies based on the latest technology trends, to practice solving of highly complex technical problems, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the selection of technologies based on the latest technology trends, and to practice solving of highly complex technical problems, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the selection of technologies based on the latest technology trends, and to practice technical problems solving, as a member of technical team, in the assigned area.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Design</p> <p>[Knowledge Items]</p> <p>-Understanding and utilization of modeling techniques</p> <p>-Design techniques</p> <p>-Design of database, middleware and distributed computing</p> <p>-Design of development environment</p> <p>-Requirements definition</p>	Level 7	
	Level 6	Able to lead the distributed computing system design and leads technical team about highly complex system, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to lead the distributed computing system design and technical team about highly complex design, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the distributed computing system design, and to carry out highly complex design, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the distributed computing system design, as a member of technical team in the assigned area.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Software Engineering</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Development techniques -Design techniques -External design -Internal design -Program design -Programming techniques -Test techniques -Development support tools -Object-oriented development -Reutilization techniques -Utilization of verification techniques -Implementation and inspection of security systems -Techniques for solving technical problems -Utilization and practice of techniques for technical verification -Standardization -Security and privacy -System audit 	Level 7	
	Level 6	Able to perform work, by leading technical team, on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform work, by carrying out technical guidance for the technical team on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform work, by giving advice to less-experienced members on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to practice work, by using software engineering technology as a member of technical team in the assigned area.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Analytical of Business applications</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Analytical of business application requirements -Analytical of technical requirements -Formulation of systematization strategies -Requirements definition of platform -Verification of system values -Informatization and management -Industry knowledge -General-purpose application contents -Latest general-purpose application trends 	Level 7	
	Level 6	Able to carry out analytical of complex and advanced business application and technical requirements, based on long term perspective on industry and technical trends, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out analytical of business application and technical requirements, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out analytical of business application and technical requirements, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out analytical of business application and technical requirements, as a member of technical team in the assigned area.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Utilization of consulting techniques</p> <p>[Knowledge Items]</p> <p>-Selection and adaptation of consulting techniques</p> <p>-Understanding and utilization of analytical tools and models</p>	Level 7	
	Level 6	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by using consulting methods, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project, by using consulting methods, as a member of technical team.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Knowledge Management and Utilization</p> <p>[Knowledge Items]</p> <p>-Management and utilization of intellectual properties</p>	Level 7	
	Level 6	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project effectively and with high quality, by carrying out creation database from intellectual property, and its utilization, maintenance, and management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management as a member of technical team.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Project Management</p> <p>[Knowledge Items]</p> <p>-Project Integration Management -Project Scope Management -Project Time Management -Project Cost Management -Project Quality Management -Project Human Resource Management -Project Communications Management -Project Risk Management -Project Procurement Management</p>	Level 7	
	Level 6	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project by plan formulation of project, implementation of plan and change management as a member of technical team, in the assigned area.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
[Career common skill item] ●Leadership [Knowledge Items] -Leadership	Level 7	
	Level 6	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by issuing instructions and orders as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to participate as a member of technical team in the assigned area.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Communication</p> <p>[Knowledge Items]</p> <p>-2-Way communication -Distribution of information -Organization, analytical, and retrieval of information</p>	Level 7	
	Level 6	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 5	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 4	Able to perform the project by keeping good communication with project members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to facilitate proper team communication, by understanding the project team status accurately, as a member of technical team.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Negotiation</p> <p>[Knowledge Items]</p> <p>-Negotiation</p>	Level 7	
	Level 6	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to make an agreement on technical issues with project team members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to obtain required information and data for the project through negotiation, by understanding the project team status accurately, as a member of technical team.

Specialty Field:

Distributed computing

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Specialty Field specific skill item]</p> <p>●Construction of Distributed Computing Systems</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Middleware technologies -Techniques for data placement -Application execution methods -Server technologies -Techniques for server deployment -Understanding and utilization of network technologies -User interface technologies -Techniques for performance evaluation -Load sharing and availability -Implementation and inspection of security systems -Security technology trends -Design of distributed applications -Design of distributed computing systems -Distributed computing development environments -Test techniques -Installation and migration plans 	Level 7	
	Level 6	Able to lead distributed computing system construction, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead technical team about construction of highly complex distributed computing system.
	Level 5	Able to lead distributed computing system construction, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out technical guidance for the technical team about construction of highly complex distributed computing system.
	Level 4	Able to lead distributed computing system construction, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out distributed computing system construction as a member of technical team in the assigned area.

Skill Proficiency/Knowledge Items

Job career: IT Specialist

Specialty Field: Security

Specialty Field:

Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Technology</p> <p>[Knowledge Items]</p> <div> <ul style="list-style-type: none"> -Latest technology trends -Latest IT market trends -Computer science fundamentals -Computer systems -Understanding and utilization of computer system architectures and fundamental technologies -System platform technologies -Platform technologies -Middleware technologies -Database technologies -Basic functions of relational database management systems -Relationship between transaction processing and synchronization points of DB -Understanding and utilization of network technologies -Internet technologies -System management technologies -Programming languages, Markup languages -Data modeling -Database design -Database operation design -Techniques for system management -Application security <ul style="list-style-type: none"> -System configuration -System development and maintenance -System development environment </div>	Level 7	
	Level 6	Able to lead the selection of technologies based on the latest technology trends, and to make plans for the security framework design, development, and installation methodology, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead a technical team about highly complex technical problems.
	Level 5	Able to lead the selection of technologies based on the latest technology trends, to practice solving of highly complex technical problems, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the selection of technologies based on the latest technology trends, and to practice solving of highly complex technical problems, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the selection of technologies based on the latest technology trends, and to practice technical problems solving, as a member of technical team, in the assigned area.

Specialty Field:
Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Design</p> <p>[Knowledge Items]</p> <p>-Understanding and utilization of modeling techniques</p> <p>-Design techniques</p> <p>-Design of database, middleware and distributed computing</p> <p>-Design of development environment</p> <p>-Requirements definition</p>	Level 7	
	Level 6	Able to lead the security system design and leads technical team about highly complex system, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to lead the security system design and technical team about highly complex design, and to carry out technical guidance for the technical team, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to lead the security system design, and to carry out highly complex design, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the security system design, as a member of technical team in the assigned area.

Specialty Field:
Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Software Engineering</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Development techniques -Design techniques -External design -Internal design -Program design -Programming techniques -Test techniques -Development support tools -Object-oriented development -Reutilization techniques -Utilization of verification techniques -Implementation and inspection of security systems -Techniques for solving technical problems -Utilization and practice of techniques for technical verification -Standardization -Security and privacy -System audit 	Level 7	
	Level 6	Able to perform work, by leading technical team, on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform work, by carrying out technical guidance for the technical team on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform work, by giving advice to less-experienced members on software engineering technology such as optimum development techniques, development support tools, and test techniques, etc, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to practice work, by using software engineering technology as a member of technical team in the assigned area.

Specialty Field:

Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Analytical of Business applications</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Analytical of business application requirements -Analytical of technical requirements -Formulation of systematization strategies -Requirements definition of platform -Verification of system values -Informatization and management -Industry knowledge -General-purpose application contents -Latest general-purpose application trends 	Level 7	
	Level 6	Able to carry out analytical of complex and advanced business application and technical requirements, based on long term perspective on industry and technical trends, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out analytical of business application and technical requirements, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out analytical of business application and technical requirements, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out analytical of business application and technical requirements, as a member of technical team in the assigned area.

Specialty Field:
Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Utilization of consulting techniques</p> <p>[Knowledge Items]</p> <p>-Selection and adaptation of consulting techniques</p> <p>-Understanding and utilization of analytical tools and models</p>	Level 7	
	Level 6	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project successfully by using consulting methods, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by using consulting methods, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project, by using consulting methods, as a member of technical team.

Specialty Field:

Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Knowledge Management and Utilization</p> <p>[Knowledge Items]</p> <p>-Management and utilization of intellectual properties</p>	Level 7	
	Level 6	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management, in the whole process from project preparation, start to completion, and post completion, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project effectively and with high quality, by carrying out creation database from intellectual property, and its utilization, maintenance, and management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project effectively and with high quality, by carrying out creation of database from intellectual property, and its utilization, maintenance, and management as a member of technical team.

Specialty Field:

Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Project Management</p> <p>[Knowledge Items]</p> <p>-Project Integration Management -Project Scope Management -Project Time Management -Project Cost Management -Project Quality Management -Project Human Resource Management -Project Communications Management -Project Risk Management -Project Procurement Management</p>	Level 7	
	Level 6	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to perform the project by cooperating with project managers in plan formulation of project, implementation of plan and change management, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out the project by plan formulation of project, implementation of plan and change management as a member of technical team, in the assigned area.

Specialty Field:
Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Leadership</p> <p>[Knowledge Items]</p> <p>-Leadership</p>	Level 7	
	Level 6	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to carry out the whole processes by issuing instructions and orders as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to carry out the project by issuing instructions and orders as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to participate as a member of technical team in the assigned area.

Specialty Field:
Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Communication</p> <p>[Knowledge Items]</p> <p>-2-Way communication -Distribution of information -Organization, analytical, and retrieval of information</p>	Level 7	
	Level 6	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 5	Able to speak about the information technology with the responsible person on customer side, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out proper 2Way communication, distribution of information, and organization, analytical, and retrieval of information.
	Level 4	Able to perform the project by keeping good communication with project members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to facilitate proper team communication, by understanding the project team status accurately, as a member of technical team.

Specialty Field:
Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Negotiation</p> <p>[Knowledge Items]</p> <p>-Negotiation</p>	Level 7	
	Level 6	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project with 50 persons or more during peak periods.
	Level 5	Able to set up a goal with the responsible person on customer side, and to make an agreement on technical issues based on a logical basis, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods.
	Level 4	Able to make an agreement on technical issues with project team members, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to obtain required information and data for the project through negotiation, by understanding the project team status accurately, as a member of technical team.

Specialty Field:

Security

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Specialty Field specific skill item]</p> <p>●Construction of Security Functions</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Implementation of consulting -Security and personal information -Security technology trends -Analytical of security -Design of security systems -Implementation and inspection of security systems -Operation and management of security systems -Review of security -Implementation and inspection of privacy systems -Threats to corporate systems -Social environments -Test techniques -Installation and migration plans 	Level 7	
	Level 6	Able to lead security function construction, as a responsible person of technical team in the project with 50 persons or more during peak periods. In addition, able to lead technical team about construction of highly complex security function.
	Level 5	Able to lead security function construction, as a responsible person of technical team in the project from 10 but less than 50 persons during peak periods. In addition, able to carry out technical guidance for the technical team about construction of highly complex security function.
	Level 4	Able to lead security function construction, as a leader of technical team in the project with less than 10 persons during peak periods.
	Level 3	Able to carry out security function construction as a member of technical team in the assigned area.

Skill Proficiency/Knowledge Items

Job career: IT Specialist

Specialty Field: Common to Level 1, 2

Specialty Field:

Common to IT Specialist

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Technology</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Latest technology trends -Latest IT market trends -Computer science fundamentals -Computer systems -Understanding and utilization of computer system architectures and fundamental technologies -System platform technologies -Platform technologies -Middleware technologies -Database technologies -Basic functions of relational database management systems -Relationship between transaction processing and synchronization points of DB -Understanding and utilization of network technologies -Internet technologies -System management technologies -Programming languages, Markup languages -Data modeling -Database design -Database operation design -Techniques for system management -Application security <ul style="list-style-type: none"> -System configuration -System development and maintenance -System development environment 	Level 2	Able to carry out work in a series of works related to system construction or installation, by using known technology and knowledge, as a member of technical team under guidance of a higher-level specialist in the same job career category.
	Level 1	Able to carry out work in either of phases of system construction or installation, by using known technology and knowledge, as a member of technical team under guidance of a higher-level specialist in the same job career category.

Specialty Field:
Common to IT Specialist

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Design</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Understanding and utilization of modeling techniques -Design techniques -Design of database, middleware and distributed computing -Design of development environment -Requirements definition 	Level 2	Able to carry out work in a series of works related to system design, by using known technology and knowledge, as a member of technical team under guidance of a higher-level specialist in the same job career category.
	Level 1	Able to carry out work in one part of works related to system design in the assigned area, by using known technology and knowledge, as a member of technical team under guidance of a higher-level specialist in the same job career category.

Specialty Field:

Common to IT Specialist

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Software Engineering</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Development techniques -Design techniques -External design -Internal design -Program design -Programming techniques -Test techniques -Development support tools -Object-oriented development -Reutilization techniques -Utilization of verification techniques -Implementation and inspection of security systems -Techniques for solving technical problems -Utilization and practice of techniques for technical verification -Standardization -Security and privacy -System audit 	Level 2	Able to practice work in a series of works related to system development, by using known development techniques, as a member of technical team under guidance of a higher-level specialist in the same job career category.
	Level 1	Able to practice work in one part of either system development in the assigned area, by using known technology and knowledge, as a member of technical team under guidance of a higher-level specialist in the same job career category.

Specialty Field:

Common to IT Specialist

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Analytical of Business applications</p> <p>[Knowledge Items]</p> <ul style="list-style-type: none"> -Analytical of business application requirements -Analytical of technical requirements -Formulation of systematization strategies -Requirements definition of platform -Verification of system values -Informatization and management -Industry knowledge -General-purpose application contents -Latest general-purpose application trends 	Level 2	Able to explain about IT system use proposal content, by analyzing business application and technical requirements in the assigned area, as a member of technical team under guidance of a higher-level specialist in the same job career category.
	Level 1	Able to carry out work in one part of analyzing business application and technical requirements in the assigned area, by using known technology and knowledge, as a member of technical team under guidance of a higher-level specialist in the same job career category.

Specialty Field:

Common to IT Specialist

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Project Management</p> <p>[Knowledge Items]</p> <p>-Project Integration Management -Project Scope Management -Project Time Management -Project Cost Management -Project Quality Management -Project Human Resource Management -Project Communications Management -Project Risk Management -Project Procurement Management</p>	Level 2	Able to carry out system design, construction, and series of work related to installation as a member of technical team by following project plan created by a higher-level specialist in the same job career category, in the assigned area.
	Level 1	Able to carry out system design, construction, and either of work related to installation as a member of technical team by following project plan created by a higher-level specialist in the same job career category, in the assigned area.

Specialty Field:
Common to IT Specialist

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Leadership</p> <p>[Knowledge Items]</p> <p>-Leadership</p>	Level 2	Able to demonstrate fundamental nature, such as teamwork, responsibility, and power of execution, etc, necessary to join the project, as a member of technical team under guidance of a higher-level specialist in the same job career category.
	Level 1	Able to participate in the project, by understanding fundamental nature, such as teamwork, responsibility, and power of execution, etc, necessary to join the project, as a member of technical team under guidance of a higher-level specialist in the same job career category.

Specialty Field:

Common to IT Specialist

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
<p>[Career common skill item]</p> <p>●Communication</p> <p>[Knowledge Items]</p> <p>-2-Way communication -Distribution of information -Organization, analytical, and retrieval of information</p>	Level 2	Able to carry out basic 2Way communication, and circulation of information, necessary to exchange technical information with technical team member, as a member of technical team.
	Level 1	Able to understand basic 2Way communication, and circulation of information, necessary to exchange technical information, and to participate in the project as a member of technical team.

Specialty Field:

Common to IT Specialist

Skill Proficiency/Knowledge Items of IT Specialist

Skill Item and Knowledge Items	Skill Proficiency	
[Career common skill item] ●Negotiation [Knowledge Items] -Negotiation	Level 2	Able to demonstrate fundamental nature such as establishing trust relationship, setting up goals, logical thinking, etc, necessary to work on technical problems solutions, as a member of technical team.
	Level 1	Able to demonstrate fundamental nature such as establishing trust relationship, setting up goals, logical thinking, etc, necessary to work on technical problems solutions, as a member of technical team.

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