



King County Integrated Data System (KIDS)

Vision - Scope

INTERLINK

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1. Project Overview

The King County Juvenile Justice Department, in conjunction with the Washington State Child Welfare Office and Washington State School System, is envisioning a system that provides access to information about children at risk maintained by various county and state agencies. The King County Juvenile Justice department has asked Interlink to assist them in the analysis and conceptual design of a centralized web portal to query the various agencies for details related to individual youths. This document covers the high-level findings and design possibilities identified during a three-week discovery and conceptual design period.

1.1 Vision

Better service for children at risk and their families through timely and efficient communication between state and county agencies

1.2 Success Factors

- A central portal linked to juvenile program data maintained by state and county agencies, accessible by authorized agency members responsible for managing children at risk
- Timely information aggregation and dissemination between agencies that track and maintain juvenile records.
- Increase efficiency for agencies and staff members that depend on related juvenile information maintained by state and county agencies.

2. Requirements

2.1 Features

2.1.1 *Internet Information Portal*

Provides centralized access to information about juveniles at risk via an Internet facing web site. The following table lists the state/county agencies and data systems that will be accessible via the portal:

State / County	Agency	Data System
King County	Juvenile Justice Department	JJWEB
Washington State	Child Welfare Services	CAMIS
Washington State	Juvenile Rehabilitation Administration	CATS
Washington State	Schools (OSPI)	CSRS
Washington State	Administrative Office of the Courts (AOC)	JUVIS

2.1.2 *Search (must have)*

- Ability to search for information using juvenile's name and/or address
- Ability to search using agency data system unique identifiers (e.g.; JCN#, JUVIS#, AVIS#)

2.1.3 *Status Change Alerts (nice to have)*

- Ability for users to subscribe to email alerts that are sent when specific juvenile's information changes in source data systems.

2.1.4 *User Authorization (potential)*

- There is a potential that access to certain information available via the portal may require specific access constraints based on user roles. The desire is to ensure all information made available is accessible by any valid system user

2.2 Security

- Accessible by authorized State and County agency staff members. No public access.
- Minimal - use strong user names and passwords for user authentication
- Potentially limit access to state and county system interfaces using digital certificates and/or restrict access to specific IP addresses
- Potentially manage user roles that are used to restrict access for system users to specific authorized content

2.3 Performance

- Response from inquiry within 10 seconds.
- It is acceptable to notify user that inquiry results will take longer than 10 seconds. User could be asked to come back later for results or be notified via email when results have been retrieved.
- Optimally, changes to information in source data systems would be accessible via the Internet facing interfaces near real-time. Minimally, changes to information in source data systems should be accessible daily.

2.4 Standards

- Interfaces will comply with the GJXDM data schema standard.

2.5 Assumptions

- Interlink assumes that the source data system owners can provide Internet facing interfaces for searching data and for triggering email alerts to subscribers (if required).
- Interlink assumes that the interfaces provided by the source data systems will utilize a common schema for the information exchanged.

3. Functional Scope

3.1 Actors

The following section identifies the primary actors (users) of the KIDS system identified during the envisioning phase. Other actors may be identified during the planning and design phases.

3.1.1 *Washington State School Administrators and Counselors*

3.1.2 *DSHS Case Workers*

3.1.3 *County and State Juvenile Justice Case Workers*

3.1.4 *County and State Prosecutors*

3.1.5 *Source Data System Administrators*

3.2 Use Cases / Scenarios

The following section illustrates some primary scenarios identified during the envisioning phase that should be enabled by the KIDS system. These scenarios are provided as a representation of the potential benefits provided by the KIDS system. Other scenarios will likely be defined during the planning and design phases.

3.2.1 *A school administrator needs to identify if a child has been detained as a result of a criminal charge.*

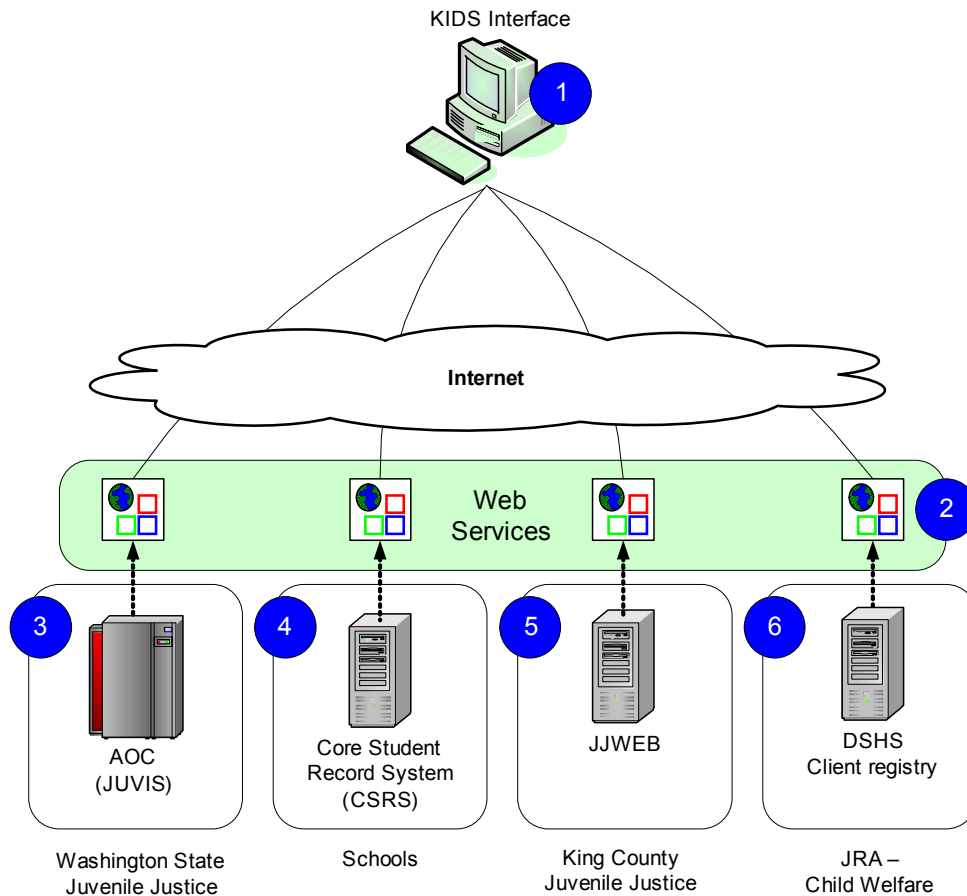
3.2.2 *A school administrator needs to identify the location at which a child is being detained and the expected duration of the detention.*

3.2.3 *A school administrator needs to contact the probation officer assigned to a juvenile*

3.2.4 *A Child Welfare case worker or juvenile justice case worker needs to identify the school in which a child is currently enrolled and corresponding school contact information*

4. Technical Scope

The following diagram depicts a high level conceptual view of an information portal that provides access to information systems maintained by the Juvenile Justice Department, Washington State Child Welfare Offices and Washington State School Systems.



An Internet portal “The Portal” [1] provides centralized access to juvenile records maintained by various state and county agencies (Juvenile Justice information maintained by the AOC [3], Washington State Schools [4], King County Juvenile Justice [5] and Washington State Department of Social Health Services [6]). The Portal authenticates users and provides an interface to search information for specific juveniles. Web Services hosted by the state and county agencies [2] provide secure access to juvenile records maintained by the agencies.

4.1 Front End (Client)

The front end client will likely be developed as a custom ASP.Net based web solution. The following list provides an overview of the basic screens required:

- Login page
- Search page
- Search results page
- (Potential) User access / rights management

4.2 Middle Tier

Depending on the design and implementation of the Internet facing source data interfaces, there is a strong potential that middle tier services will be required to facilitate aggregation of data from the various source data systems and to ensure acceptable performance. Some potential options are Microsoft BizTalk Server or a custom middle tier data layer that provides a cached view of the high level information required for searching the host data systems.

4.3 Backend

The data required by the KIDS system is maintained in data systems hosted by the various County and State agencies. Each host data system will be required to provide an Internet facing data interface (adapter) that presents the information required via The Portal. Preferably, these interfaces will be developed as a web services.

5. Resource Estimates

Human Resource Estimates

- 1 Program Manager
- 1 Solution Architect
- 2 Developers
- 1 Tester

Cost Estimates

- Approximately 4 – 6 Month Project
- 1500 – 2000 Total Man Hours
- \$225,000 - \$300,000 for planning and implementation
- \$50,000 - \$100,000 for hardware and software

6. Conclusions and Action Items

6.1 Conclusion

Enabling the vision and high level requirements for the KIDS system defined in the envisioning phase should not pose significant technological challenges. The concept of linking information from a number of disparate systems is one that is frequently performed in IT infrastructures and one for which Interlink has significant experience and success. This is not to say there won't be challenges associated with implementing the KIDS system.

The most difficult challenges for the KIDS system are not technological challenges. The first and foremost challenge will be identifying the legal concerns related to confidentiality and privacy when sharing information between agencies, acquiring legal consensus from each agency for the data to be exposed and subsequently defining an authorization model that allows each agency to control the level of information exposed to the participants accessing the KIDS system.

Once the legal concerns have been addressed, the next major challenge will be to define a process for matching information in each system with a high level of confidence. Each of the source data systems maintain varying information used to identify a unique individual. In order to link the information maintained by each source agency, the KIDS system will need to enable a programmatic process to identify similar, if not exactly the same, sets of information. A human based process for validating the match identified by the system, with minimal overhead, will need to be defined in order to ensure accurate information is provided by the KIDS system.

The remaining challenges will be related to working with the various State and County agencies to plan and implement interfaces that expose the information required by the KIDS system on a coordinated time line.

6.2 Action Items

6.2.1 Present vision and scope to Executive Steering Committee

6.2.2 Secure funding

6.2.3 Address legal concerns related to information sharing between agencies

6.2.4 Identify KIDS system owner

6.2.5 Schedule planning and implementation phases

7. Appendix

7.1 Customer Information

7.1.1 Washington State Department of Social Health Services (DSHS)

Client Registry

Name	Role	Phone	Email
Lee Selah	Business	206-691.2515	sele300@dshs.wa.gov
Dave Sugarman	Technical	360.902.7869	sugarda@dshs.wa.gov
Jerry Britcher	Head of DSHS Enterprise Architecture		

Child Welfare (CW)

Name	Role	Phone	Email
Lee Selah	Business	206-691.2515	sele300@dshs.wa.gov
Tami Cordova	Technical	(360) 902-7926	Ctam300@dshs.wa.gov

Juvenile Rehabilitation Association (JRA)

Name	Role	Phone	Email
Kathleen Harvey	Business	206.464.7345	harvekl2@dshs.wa.gov
Dave Guthman	Technical	360.902.8085	guthmdr@dshs.wa.gov
Dan Cathers	Technical		CatheDR@dshs.wa.gov

7.1.2 King County Juvenile Justice (JJ)

Name	Role	Phone	Email
Michael Curtis	Business	206.205.9737	Michael.Curtis@METROKC.GOV
Betty Hopper	Technical	206.296.9097	betty.hopper@metrokc.gov

7.1.3 State Schools (OSPI)

Name	Role	Phone	Email
Marilyn Holm	Business	253.931.4927	mkholm@auburn.wednet.edu
Ron Hertel	Business		rhertel@ospi.wednet.edu
Annie Blackledge	Business		ambl300@dshs.wa.gov
Joe Egan.	Technical		jegan@ospi.wednet.edu
Jennifer Stevens (Sec)	Joe's Secretary	360.725.6389	jstevens@ospi.wednet.edu

7.2 Definitions and Acronyms

Item	Definition
AOC	Administrative Offices of the Court
DSHS	Department of Social Health Services
FERPA	Family Educational Rights and Privacy Act
HIPAA	The Health Insurance Portability & Accountability Act
IGN	Intergovernmental Network
JCN	Unique identifier in the JJWEB application
JIN	Justice Information Network
JJWEB	King County Juvenile Justice Web
JRA	Juvenile Rehabilitation Services
JUVIS	Juvenile Information System
KIDS	King County Data Integration System
OSPI	Office of Superintendent of Public Instruction

7.3 Web Resources

URL	Description
www.dis.wa.gov	Washington State Department of Information Services public website
www.jin.wa.gov	Justice Information Network public website
www.courts.wa.gov	Administrative Office of the Courts public website
http://www1.dshs.wa.gov	DSHS public web site
http://www.k12.wa.us	WA - Office of Superintendent of Public Instruction
http://www.hipaa.org	HIPAA web site
http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.htm	FERPA defined

7.4 Agency Data System Documentation

7.4.1 DSHS Client Registry

Overview

The Client Registry offers a profile, a list of all the program areas that have authorized or provided DSHS services within the last year. If an identified are is of interest, Client Registry indicates when and where the service was provides and a phone number to help other case managers that share the same client. The CR is a pointer to more detailed information, which is available in the corresponding department's information systems.

System Architecture Info

Item	Details
Database Architecture	SQL Server 2000
Middle Tier	None
Client Tier	ASP.NET
Authentication	<ul style="list-style-type: none"> • Custom User Name and Password for users outside domain • Active Directory for users inside domain
Internet Exposure	None. Will need to work with DIS (Department of Information Systems) for approval and logistics.

Notes:

- Will likely need to host system in the Department of Information Systems (DIS) data center
- Possible connectivity to state hosted data sources via the Inter Governmental Network (IGN) which is accessible by state and county agencies
- IWAY Adapters (Software AG) used to access various State data sources.

7.4.2 JRA (CATS)
Overview

Stores juvenile detention admission and release info (juvenile contact info, locations). Converting from legacy UNIX based system (established early 80's) to new system. Conversion complete by June '06. Portions of system already converted. New system SQL backend with .NET Win Forms front end (VB.NET moving to C#)

System Architecture Info

Item	Details
Database Architecture	SQL Server 2000
Middle Tier	.NET Web Services (VB & C#)
Client Tier	.NET Win Forms (VB & C#)
Authentication	<ul style="list-style-type: none"> • Custom User Name and Password for legacy system • Active Directory for new system
Internet Exposure	None. Will need to work with DIS (Department of Information Systems) for approval and logistics. Not in budget (either manpower or hardware)

Notes:

- JRA information is accessed via the Client Registry

7.4.3 *Child Welfare Data System (CAMIS)*

Overview

System that provides for the automated administration and tracking of clients and services for DSHS Children's Administration. CAMIS provides case management support, allows social workers to track clients statewide. Approximately 2,700 social workers, clerical staff, and managers use CAMIS statewide. CAMIS is also used by organizations outside CA such as the Office of the Attorney General, public health nurses, the Washington Association for Prevention of Child Abuse and Neglect, and Native American Tribes. CAMIS is currently undergoing a major architecture redesign – delivery date is TBD.

System Architecture Info

Item	Details
Database Architecture	CICS Natural/ADABA
Middle Tier	DCOM and SysQL
Client Tier	Win32 Client
Authentication	<ul style="list-style-type: none"> • Custom User Name and Password for Win32 Client system • RACF for Mainframe
Internet Exposure	None. Will need to work with KC-ITS department for approval and logistics.

Notes:

- Child Welfare information is accessed via the Client Registry

7.4.4 *King County Juvenile Justice (JJWEB)*

Overview

ASP.NET and SQL Server based application that provides access to juvenile justice data for juveniles with referrals in King County. Includes juvenile contact info, parole officer info, KC court case and booking information. KC enters info for juvenile cases that are filed by a prosecutor into AOC – JUVIS system. JJWEB maintains JUVIS# (ID) as cross-reference

System Architecture Info

Item	Details
Database Architecture	SQL Server 2000
Middle Tier	.NET Web Services (VB & C#)
Client Tier	.NET Win Forms (VB & C#)
Authentication	<ul style="list-style-type: none"> • Custom User Name and Password for legacy system
Internet Exposure	None. Will need to work with KC-ITS department for approval and logistics.

7.4.5 Washington State Schools - Core Student Records System (CSRS)

Overview

The CSRS was developed to support the requirements of the No Child Left Behind act. The system maintains 74 data elements (24 are required) related to children enrolled in Washington State Schools. The system randomly generates a unique student identifier based on student name, birth date and gender. Access is limited to a select set of Washington State School staff members and administrators.

System Architecture Info

Item	Details
Database Architecture	SQL Server 2000
Middle Tier	None
Client Tier	ASP.NET (C#)
Authentication	Custom – user/passwords stored in SQL tables
Internet Exposure	The app is accessible via the Internet

7.4.6 Administrative Office of the Courts (JUVIS)

Overview

JUVIS is the Washington State Juvenile Courts' case tracking system and provides data on each offense sentenced or diverted in the state. Each of the 39 counties in the state participates in JUVIS.2 JUVIS is organized around "referrals." Each youth is assigned a unique ID number (JUVIS number) and each referral is assigned a unique referral number. Referrals may refer to one or more offenses. The final disposition of an offense in a referral may be diversion, a guilty plea, an adjudication of guilty, a deferred adjudication/disposition, or a decline (to adult court).

System Architecture Info

Item	Details
Database Architecture	DB2, SQL Server
Middle Tier	WebSphere, BizTalk Server
Client Tier	Website
Authentication	??
Internet Exposure	Web Services for data mining are currently being planned - Summer 2005

Notes:

- JINDEX project** (<http://www.jin.wa.gov/JINDEXSolution%20Brochure.pdf>) – Justice Information Network Data Exchange is a message broker at the Department of information Service (DIS) that facilitates interagency communications using web services and XML. The state is validating JINDEX with King County and Yakima County, where users will be able to issue requests for Case and Criminal History (CACH) information from state repositories.

7.5 KIDS Data Elements

The following table represents the data elements identified during the envisioning process that should be considered to be exposed by the KIDS system.

Data Element	P1 - Must Have P2 - Should Have P3 - Nice to Have	Searchable	Count	Latest Date	Can Get Details	Confidentiality Concerns	Comments / Clarification
Contact Info							
First Name	P1 - Must Have	Yes	No	No	No		
Last Name	P1 - Must Have	Yes	No	No	No		
Middle Name	P1 - Must Have	Yes	No	No	No		
Gender	P1 - Must Have	Yes	Yes	No	No		
Race	P1 - Must Have	Yes	Yes	No	No		
Ethnicity	P1 - Must Have	Yes	Yes	No	No		
Address	P2 - Should Have	Yes	Yes	Yes	No		[Michael C] count by city, zip code
Parent First Name	P2 - Should Have	Yes	No	No	No		
Parent Last Name	P2 - Should Have	Yes	No	No	No		
Parent Address	P2 - Should Have	Yes	Yes	No	No		[Michael C] count by city, zip code
Juvenile Justice Data							
Adjudicated Offenses	P1 - Must Have	Yes	Yes	Yes	Yes		
Pending Charges / Scheduled Court Hearings	P1 - Must Have	Yes	Yes	Yes	No		
Current Court Orders	P1 - Must Have	Possibly	No	Yes	Yes		
Services Provided by the Juvenile Justice System	P2 - Should Have	Yes	Yes	Yes	Yes		
Existing Behavioral Concerns	P3 - Nice to Have	Yes	Yes	Yes	Yes		
Mental health History / Diagnosis	P3 - Nice to Have	Possibly	Possibly	Possibly	Possibly	[Michael C] HIPPA Gustavason: this is sensitive, so inquirer should call agency contact for details	
Learning Disabilities	P3 - Nice to Have	Possibly	Possibly	Possibly	Possibly	[Michael C] HIPPA & FERPA Gustavason: inquirer should call agency contact for details	



Substance Abuse Concerns	P2 - Should Have	Possibly	Possibly	Possibly	Possibly	Possibly	[Michael C] HIPPA Gustavson: inquirer should call agency contact for details	
Medical Alerts / Conditions	P2 - Should Have	Possibly	Possibly	Possibly	Possibly	Possibly	[Michael C] HIPPA Gustavson: Details should primarily come from a phone call to avoid too much medical info on the system	
Assigned JPC name and Contact Info	P1 - Must Have	Yes	Yes	Yes	Yes	No		
Actions taken to locate parent	P3 - Nice to Have	No	No	No	No	No		
Safety Concerns	P2 - Should Have	Yes	Yes	Yes	Yes	Yes	Gustavson: If involves mental health or substance abuse issue, be careful with confidentiality	
Risk Assessment Results	P2 - Should Have	Yes	Yes	Yes	Yes	Yes	Gustavson: Some info in assessment could be confidential	
Detention Status (secure, ASD)	P1 - Must Have	Yes	Yes	Yes	Yes	Yes		
Assigned Parole counselor/contact info	P1 - Must Have	Yes	Yes	Yes	Yes	No		
Juvenile's unique ID in JJWEB (JCN)	P1 - Must Have	Yes	No	No	No	No		
Child Welfare								
Juvenile's prior CPS referrals/outcomes	P2 - Should Have	No	Yes	Yes	Yes	Yes	Gustavson: confidentiality issues may be raised by some at DSHS but RCW 13.50 should authorize sharing for case planning purposes	
Is the juvenile currently being served by DSHS	P1 - Must Have	Yes	No	Yes	Yes	Yes	See above	
Services offered to family. Service accepted, services that worked	P2 - Should Have	Yes	Yes	Yes	Yes	Yes	See above	
Prior Placements	P3 - Nice to Have	Yes	Yes	Yes	Yes	Yes	See above	
Current Placements	P1 - Must Have	Yes	Yes	Yes	Yes	Yes	See above	
Reason for current placement	P3 - Nice to Have	Yes	Yes	Yes	Yes	Yes	See above	
DCFS Social Worker Contact Info	P1 - Must Have	Yes	Yes	Yes	Yes	No	See above	
Juvenile's placement history	P3 - Nice to Have	Yes	Yes	Yes	Yes	Yes	See above	
Existing behavioral concerns	P3 - Nice to Have	Yes	Yes	Yes	Yes	Yes	See above	
Mental health History	P3 - Nice to Have	Possibly	Yes	Yes	Yes	Yes	[Michael C] HIPPA	
Learning Disabilities	P3 - Nice to Have	Possibly	Yes	Yes	Yes	Yes	[Michael C] HIPPA & FERPA	
Drug/Alcohol Concerns	P3 - Nice to Have	Possibly	Yes	Yes	Yes	Yes	[Michael C] HIPPA	
Medical Alerts/current medications	P3 - Nice to Have	Possibly	Yes	Yes	Yes	Yes	[Michael C] HIPPA	





DSHS services for which the juvenile is eligible	P3 - Nice to Have	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Juvenile's unique ID in CAMIS	P1 - Must Have	Yes	No	No	No	No	No	No	No
Juvenile's foster-parent's/care provider's names/contact information	P1 - Must Have	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Gustavson: Foster Parent information fairly carefully protected by DSHS - check with agency
ISSP	P3 - Nice to Have	Possibly	No	No	No	No	No	No	Yes
School Data									
School where juvenile is currently enrolled	P1 - Must Have	Yes	Yes	Yes	Yes	Yes	Yes	Possibly	[Michael C] FERPA
School contact person and contact info	P1 - Must Have	Yes	Yes	Yes	Yes	Yes	Yes	No	[Michael C] FERPA
Juvenile's class schedule	P3 - Nice to Have	No	No	No	No	No	No	Possibly	[Michael C] FERPA
Juvenile's attendance record	P3 - Nice to Have	No	No	No	No	No	No	Yes	[Michael C] FERPA
IEP	P3 - Nice to Have	Yes	Yes	Yes	Yes	Yes	Yes	Yes	[Michael C] FERPA
Suspension, expulsion history	P3 - Nice to Have	No	No	No	No	No	No	Yes	[Michael C] FERPA
Juvenile's unique ID in OSPI's Core Student record System	P1 - Must Have	Yes	No	No	No	No	No	No	[Michael C] FERPA

Column Legend

Data Element	The friendly name for the piece of data required
P1 - P3	Select the importance of this data element (Must Have, Should Have, Nice to Have). This will help us prioritize the work and balance requirements with cost/difficulty
Searchable	Should this element be searchable from the KIDS interface
Count	If there can be multiple occurrences of the data, should we present a count of the total number
Latest Date	If there can be multiple occurrences of the data, should we provide the latest date
Can Get Details	If there can be multiple occurrences of the data, should we provide the ability to review the details (e.g.; Current Court Orders, Pending Charges, etc.)
Confidentiality Concerns	List any confidentiality concerns related to the information. Contributors to this column should preface their entry with their name so we can document who made raised the concern.
Other Comments	Provide any additional comments. Contributors to this column should preface their entry with their name so we know who made the comment.

7.6 Project Work Breakdown Structure

