HR technology leaders met recently in Tokyo to learn about, and plan for, a new Japan-based HR-XML initiative.

Approximately 80 people attended the general-industry, outreach meeting held on May 15th. About 150 people attended a May 16th meeting that focused on staffing.

HR-XML Consortium Board President, Lon Pilot of Watson Wyatt Worldwide, provided delegates at each meeting an introduction to the HR-XML Consortium. HR-XML Board Member Terry Baker of Hire.com presented HR-XML Case Studies including Hire.com's recent implementation of HR-XML's Staffing Exchange Protocol and integration with SAP at Chiron Inc, a $1.5 billion international biotech company.

HR-XML Consortium Executive Director Chuck Allen provided an update on the Consortium's Competencies specification. Allen was joined by Dr. Kenji Hirata of the Sanno Institute who reviewed the work of the Japan-based Advanced Learning Infrastructure Consortium (ALIC) and the relationship its work to that of HR-XML and other organizations, such as the IMS Global Learning Consortium. Representatives from Japan's Ministry of Economy, Trade and Industry and from the Labor Policy Bureau addressed delegates at the May 15 meeting and expressed their support for formation of a Japanese chapter of the HR-XML Consortium.

The HR-XML Consortium Japan sponsors are in the process of applying with the Japanese government for official status as a Non-Profit Organization (NPO). HR-XML Consortium President Lon Pilot signed a memorandum of understanding which pledged support for the Japanese group while it is in this formative stage. Formal approval of HR-XML Consortium Japan as an NPO is expected by October 2003.

Many thanks to BISCO Corp.,Ltd. and The Mainichi Newspapers for organizing and supporting these meetings. A special thanks to Kenji Tsuchida, President, BISCO Co.,LTD. and Masahiko Minoda, Director, Mainichi Incubation Center, for their hospitality and for their many contributions to making these meetings a success.
Presentations:

HR-XML: An Introduction, Lon Pilot, Watson Wyatt Worldwide, HR-XML Consortium President

HR-XML Case Studies, Terry Baker, Hire.com

HR-XML Competencies Update, Chuck Allen, HR-XML Consortium

An Introduction to Staffing Industry Data Exchange Standards, Chuck Allen, HR-XML Consortium
HR-XML: An Introduction

Lon Pilot
Systems Consultant, Watson Wyatt Worldwide
President, HR-XML Consortium
Agenda

- An introduction to the HR-XML Consortium (HR-XML).
  - Technology.
  - Standards process.
- HR-XML workgroups.
  - Mission and progress to date.
- Organizing HR-XML internationally.
HR-XML Goals in Japan

- Promote Adoption.
- Be Influenced – Learn about, and respond to, Japanese requirements.
- Assist in forming a local initiative to develop Japanese extensions based on the discovered requirements.
The Best Standards Are the Ones You Take for Granted....

**Electricity:** A common voltage and plug within most countries; known and standard means for converting voltages and adapting plugs when moving between countries.
Standards for Human Resources?

- Definitely a ‘heterogeneous’ environment – a growing number of software and service offerings.

- A heterogeneous environment is good. Having software and service choices is good for employers.

- HR was by-passed by early standardization initiatives (e.g., Finance, Purchasing, Insurance, Banking, Transportation).

- The lack of standards makes connecting different systems difficult and expensive.
What Is Needed?

- A standard business vocabulary:
  - HR-XML, a data interchange vocabulary for human resources.
- Standard implementation frameworks:
  - Web services
  - SOAP
  - ebXML
“...web services is promising to make the process of connecting best-of-breed applications simpler and less costly than it has been in the past, when complicated interfaces were required to integrate solutions from different vendors.”
Typical HR Transactions Today
‘The Spider Web’

Employers
- Cisco Systems
- Intel
- Northrop Grumman

Job Boards
- monster
- careerbuilder.com

Recruiting Solutions
- peopleclick
- Hire.com
- recruitsoft

Staffing/Recruiting Cos.
- Randstad
- Manpower
- Kelly

HRMS Vendors
- Oracle
- SAP
- Ultimate Software

Other Recruiting Solutions
- CDI
- Kenexa
- Brassring
There Has to Be a Better Way: End-User Laments

“Every time I add a new HR service provider, I have to learn another set of conventions for communication.”

“Even though we’re using XML, some of our trading partners aren’t using XML at all, while other trading partners are using their own flavor of XML.”

“I would like to try new HR services, but setting up our database to work with their systems is costly.”
The ‘n(n-1)’ Problem: Before

OAGI (www.openapplications.org) has a mathematical model for sizing the effort required to maintain an unbounded growth of interfaces.

The number integration points between objects (assumes two way integration) grows at a rate of n(n-1).

4 components = 12 interfaces
10 components = 90 interfaces
20 components = 380 interfaces

The formula looks like this:
For n = 20 components: 20(20-1) = 380. Multiply 380 times 0.025 FTEs (a half-day per month). The effort required to maintain the interfaces for 20 software components could be 9 fulltime equivalent persons.

The ‘n(n-1)’ Problem: After

Going from many-to-many to many-to-one dramatically reduces integration costs. The formula is simplified to a flat $n \times 2$.

For $n = 20$ components: $20 \times 2 = 40$. Where 40 is the minimum number of connections between 20 software components. Multiply 40 times 0.025 FTEs and the result is 1.0 FTEs.

What Is XML?

- eXtensible Markup Language is a language for creating “markup” languages or “vocabularies.”
- Looks like HTML, but XML allows the definition of custom tags to describe information explicitly.
How HTML Works...

Returns HTML describing how to display something:

```
<HTML>
  <B>
    <I>Lon</I>
  Pilot
  </B>
</HTML>
```

HTML defines how documents should be displayed; it does not describe what the data are. The tags are “hard coded” for display.
How XML Works…

Returns XML defining what is being sent:

```xml
<Employee>
  <First>Lon</First>
  <Last>Pilot</Last>
</Employee>
```

First: Lon
Last: Pilot

An XML document defines what the data are, not how they are displayed.

Programs “parse” this XML data.
What Is HR-XML?

- Independent, non-profit corporation (Dec 1999).
- Define standard vocabularies to streamline HR data interchange.
- Open to users, vendors, consultants, standards bodies, employers and other end-users, and individuals.
- 100+ organizational members.
- International – Mission to produce specifications that are relevant and useful across many country contexts.
Why HR-XML?

“The issue of vocabulary is one of the most important questions surrounding XML today. Just because we obey the rules of XML doesn't mean we are creating messages that people outside our circles can understand.”
HR-XML focuses on specifications for message payload, but aims to provide context and guidance to enable the entire exchange.
Project Methodology

1. Write/Submit Proposal
2. BSC Proposal Review/Approval
3. Develop Project Plan
4. Model Business Process
5. Define Elements/Attributes
6. Develop Schema
7. Compile Documentation
8. Create Schema Examples
9. Specification Review/Approval (TSC, CPO)
10. Membership Review/Approval
11. Deploy Approved Specification
12. Maintenance

Review/Approval (TSC, CPO)
Project Team

- Team lead is responsible for determining the schedule and facilitating the project.
- Secretary records all decisions and posts minutes to team web page.
- Schema editor makes schema changes and provides graphical illustrations.
- Document editor responsible for consolidating documentation.
- Domain experts share knowledge of the business process, enabling team to build a comprehensive standard.
Model a Business Process

Staffing Agency Transaction

<table>
<thead>
<tr>
<th>Staffing Supplier</th>
<th>Staffing Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Match Order with Resource</td>
<td></td>
</tr>
<tr>
<td>3. Submit Resource</td>
<td></td>
</tr>
<tr>
<td>6. Receive Rejection</td>
<td></td>
</tr>
<tr>
<td>7. Receive Acceptance</td>
<td></td>
</tr>
<tr>
<td>8. Notify Resource</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staffing Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Submit Staffing Order</td>
</tr>
<tr>
<td>4. Receive Resource</td>
</tr>
<tr>
<td>5. Accept</td>
</tr>
<tr>
<td>Resume</td>
</tr>
</tbody>
</table>

No  Yes
Standards with No Compromise!

- Does not dictate a process or business model.
- Encapsulates vast industry knowledge.
- Includes ample built-in options.
- Is extensible – Allowing implementers to meet custom requirements and to differentiate by building value on top of the standards.
- Is aligned with emerging technologies.
- XML is supported by IBM, Microsoft, Sun, and other technology leaders.
Are Our Drivers, Your Drivers?

- Delivering employee and manager self-service.
- Moving from paper and batch processes to real-time.
- Giving employees access to an integrated collection of information about pay and benefits from a single access point.
- Flexibly integrating “best-of-breed” solutions with core HR systems.
- Reaching ROI faster by reducing the amount of custom work necessary for solutions to become productive.
- Outsourcing business processes.
Who’s Driving HR-XML?

Acord; Adecco Corporation*; ADP*; Aetna US Healthcare*; Allegis Group, Inc./Thingamajob.com*; American Background Information Services, Inc.; American Staffing Association; ARINSO International; Association of Test Publishers; Authoria*; Automating Peripherals Inc; Best Software; BP; BrassRing, Inc.; CareerBuilder; CDI Corp/MRI*; Ceridian*; Cisco Systems; CitiStreet*; CompuCorps Mentoring; Convergys Employee Care; Crestone International*; Cross Current Corporation; Cyborg Systems, Inc.*; Defense Finance and Accounting Service; Development Dimensions International; Dobbs Temporary Services, Inc.; eBenX*; EdVerify, Inc.; Elance, Inc.; Embrace Ltd*; Employease, Inc.*; Enrollcom; e-peopleserve ltd; esohXML.org; European Community Telework Forum; ExecuTRACK Software GmbH; Fidelity Investments*; Fieldglass, Inc.; Great Plains*; Halcyon Internet plc; Hewitt Associates LLC*; Hewlett-Packard Co; Hire.com*; HireCheck*; HireRight, Inc.; IBM*; Insurance Overload Systems*; International Association for Human Resource Information Management (IHRIM); Intuit*; J.D. Edwards*; Job Partners Ltd; Kadiri,Inc.*; Kelly Services*; Kenexa, Inc.*; Korn/Ferry International*; Kronos Incorporated; MagnaWare, Inc.; Manpower, Inc.*; Mercer Human Resource Consulting; Microsoft*; Minnesota Life; Monster.com; Motorola; MPS Group*; National Resume Writers' Association; Object Management Group; One Step Europe Limited; Oracle*; Paychex Inc.; Peopleclick*; PeopleSoft*; Personinc*; ProAct Technologies, Inc.*; ProBusiness Services, Inc.; Profile Up; Prudential Financial; Randstad Holding*; Recruitsoft, Inc.; RewardsPlus; Robert Half International, Inc.*; Rompetrol Refining -- Petromidia Complex; SAP*; Schlumberger; Shell Oil Company -- Shell People Services; Siemens Business Services oHG; Society for Human Resource Management; Spherion Corporation*; Subcontract.com Inc.; Swedish National Labour Market Board; Synhrgy HR Technologies, Inc.; Tesseract Corporation*; The 401(k) Company; The People Business Network, Inc.; totaljobs.com; Towers Perrin*; Transcentive; Ultimate Software*; Unicru; Unifi Network; Vediore NV; Volt Services Group*; Watson Wyatt Worldwide*; Workscape, Inc.
Who’s Driving: HR Software/Services

Acord; Adecco Corporation*; ADP*; Aetna US Healthcare*; Allegis Group, Inc./Thingamajob.com*; American Background Information Services, Inc.; American Staffing Association; ARINSO International; Association of Test Publishers; Authoria*; Automating Peripherals Inc; Best Software; BP; BrassRing, Inc.; CareerBuilder; CDI Corp/MRI*; Ceridian*; Cisco Systems; CitiStreet*; CompuCorps Mentoring; Convergys Employee Care; Crestone International*; Cross Current Corporation; Cyborg Systems, Inc.*; Defense Finance and Accounting Service; Development Dimensions International; Dobbs Temporary Services, Inc.; eBenX*; EdVerify, Inc.; Elance, Inc.; Embrace Ltd*; Employease, Inc.*; Enrollcom; e-peopleserve ltd; esohXML.org; European Community Telework Forum; ExecuTRACK Software GmbH; Fidelity Investments*; Fieldglass, Inc.; Great Plains*; Halcyon Internet plc; Hewitt Associates LLC*; Hewlett-Packard Co; Hire.com*; HireCheck*; HireRight, Inc.; IBM*; Insurance Overload Systems*; International Association for Human Resource Information Management (IHRIM); Intuit*; J.D. Edwards*; Job Partners Ltd; Kadiri, Inc.*; Kelly Services*; Kenexa, Inc.*; Korn/Ferry International*; Kronos Incorporated; MagnaWare, Inc.; Manpower, Inc.*; Mercer Human Resource Consulting; Microsoft*; Minnesota Life; Monster.com; Motorola; MPS Group*; National Resume Writers' Association; Object Management Group; One Step Europe Limited; Oracle*; Paychex Inc.; Peopleclick*; PeopleSoft*; ProAct Technologies, Inc.*; ProBusiness Services, Inc.; Profile Up; Prudential Financial; Randstad Holding*; Recruitsoft, Inc.; RewardsPlus; Robert Half International, Inc.*; Rompetrol Refining -- Petromidia Complex; SAP*; Schlumberger; Shell Oil Company -- Shell People Services; Siemens Business Services oHG; Society for Human Resource Management; Spherion Corporation*; Subcontract.com Inc.; Swedish National Labour Market Board; Synhrgy HR Technologies, Inc.; Tesseract Corporation*; The 401(k) Company; The People Business Network, Inc.; totaljobs.com; Towers Perrin*; Transcentive; Ultimate Software*; Unicru; Unifi Network; Vedior NV; Volt Services Group*; Watson Wyatt Worldwide*; Workscape, Inc.
Who’s Driving: Staffing Cos.

Acord; Adecco Corporation*; ADP*; Aetna US Healthcare*; Allegis Group, Inc./Thingamajob.com*; American Background Information Services, Inc.; American Staffing Association; ARINSO International; Association of Test Publishers; Authoria*; Automating Peripherals Inc; Best Software; BP; BrassRing, Inc.; CareerBuilder; CDI Corp/MRI*; Ceridian*; Cisco Systems; CitiStreet*; CompuCorps Mentoring; Convergys Employee Care; Crestone International*; Cross Current Corporation; Cyborg Systems, Inc.*; Defense Finance and Accounting Service; Development Dimensions International; Dobbs Temporary Services, Inc.; eBenX*; EdVerify, Inc.; Elance, Inc.; Embrace Ltd*; Employease, Inc.*; Enrollcom; e-peopleserve ltd; esohXML.org; European Community Telework Forum; ExecuTRACK Software GmbH; Fidelity Investments*; Fieldglass, Inc.; Great Plains*; Halcyon Internet plc; Hewitt Associates LLC*; Hewlett-Packard Co; Hire.com*; HireCheck*; HireRight, Inc.; IBM*; Insurance Overload Systems*; International Association for Human Resource Information Management (IHRIM); Intuit*; J.D. Edwards*; Job Partners Ltd; Kadiri,Inc.*; Kelly Services*; Kenexa, Inc.*; Korn/Ferry International*; Kronos Incorporated; MagnaWare, Inc.; Manpower, Inc *; Mercer Human Resource Consulting; Microsoft*; Minnesota Life; Monster.com; Motorola; MPS Group*; National Resume Writers' Association; Object Management Group; One Step Europe Limited; Oracle*; Paychex Inc.; Peopleclick*; PeopleSoft*; ProAct Technologies, Inc.*; ProBusiness Services, Inc.; Profile Up; Prudential Financial; Randstad Holding*; Recruitysoft, Inc.; RewardsPlus; Robert Half International, Inc*; Rompetrol Refining -- Petromidia Complex; SAP*; Schlumberger; Shell Oil Company -- Shell People Services; Siemens Business Services oHG; Society for Human Resource Management; Spherion Corporation*; Subcontract.com Inc.; Swedish National Labour Market Board; Synhrgy HR Technologies, Inc.; Tesseract Corporation*; The 401(k) Company; The People Business Network, Inc.; totaljobs.com; Towers Perrin*; Transcentive; Ultimate Software*; Unicru; Unifi Network; Vedior NV; Volt Services Group*; Watson Wyatt Worldwide*; Workscape, Inc.
Who’s Driving: Customers

Acord; Adecco Corporation*; ADP*; Aetna US Healthcare*; Allegis Group, Inc./Thingamajob.com*; American Background Information Services, Inc.; American Staffing Association; ARINSAO International; Association of Test Publishers; Authoria*; Automating Peripherals Inc; Best Software: BP; BrassRing, Inc.; CareerBuilder; CDI Corp/MRI*; Ceridian*; Cisco Systems; CitiStreet*; CompuCorps Mentoring; Convergys Employee Care; Crestone International*; Cross Current Corporation; Cyborg Systems, Inc.*;

Defense Finance and Accounting Service; Development Dimensions International; Dobbs Temporary Services, Inc.; eBenX*; EdVerify, Inc.; Elance, Inc.; Embrace Ltd*; Employease, Inc.*; Enrollcom; e-peopleserve ltd; esohXML.org; European Community Telework Forum; ExecuTRACK Software GmbH; Fidelity Investments*; Fieldglass, Inc.; Great Plains*; Halcyon Internet plc; Hewitt Associates LLC*; Hewlett-Packard Co; Hire.com*; HireCheck*; HireRight, Inc.; IBM*; Insurance Overload Systems*;

International Association for Human Resource Information Management (IHRIM); Intuit*; J.D. Edwards*; Job Partners Ltd; Kadiri,Inc.*; Kelly Services*; Kenexa, Inc.*; Korn/Ferry International*; Kronos Incorporated; MagnaWare, Inc.; Manpower, Inc.*; Mercer Human Resource Consulting; Microsoft*; Minnesota Life; Monster.com; Motorola; MPS Group*; National Resume Writers!

Association; Object Management Group; One Step Europe Limited; Oracle*; Paychex Inc.; Peopleclick*; PeopleSoft*; ProAct Technologies, Inc.*; ProBusiness Services, Inc.; Profile Up; Prudential Financial; Randstad Holding*; Recruitsoft, Inc.; RewardsPlus; Robert Half International, Inc.*; Rompetrol Refining -- Petromidia Complex; SAP*; Schlumberger; Shell Oil Company -- Shell People Services; Siemens Business Services oHG; Society for Human Resource Management; Spherion Corporation*;

Subcontract.com Inc.; Swedish National Labour Market Board; Synhrgy HR Technologies, Inc.; Tesseract Corporation*; The 401(k) Company; The People Business Network, Inc.; totaljobs.com; Towers Perrin*; Transcendive; Ultimate Software*; Unicru; Unifi Network; Vedior NV; Volt Services Group*; Watson Wyatt Worldwide*; Workscape, Inc.
What Has HR-XML Accomplished?

- HR-XML is approaching its 4th anniversary (Oct. 1999 kickoff meeting).
- Our initial set of specifications approved in 2000 included only 3 schemas (dtd syntax).
- HR-XML has made steady progress since.
- HR-XML’s forthcoming release is a library of more than 80 interdependent major schemas and component schemas.
- The pace of adoption is increasing.
What Has HR-XML Accomplished?

Major Specifications

- Staffing Exchange Protocol
- Benefits Enrollment
- Payroll Benefit Contributions/Payroll Instructions
- Time-Expense Reporting
- Background Checks
- Employee Stock Options/Stock Purchase
- Staffing Industry Data Exchange Standards
What Has HR-XML Accomplished?

HR Components

- EducationHistory
- EmploymentHistory
- MilitaryHistory
- DemographicDetail
- Competencies
- LicenseOrCertification
- SecurityCredential
- PublicationHistory
- PatentHistory
- Reference (Personal/Professional Reference)
- Achievements
- Associations (Professional, Industry, Civic, etc.)
What Has HR-XML Accomplished?
CPO’s – A Broader Set of Reusables

- Person Name
- Postal Address
- Organization (Organizations, OrganizationalUnits, and their members)
- DateTime Data Types (provides ability to require or prohibit the Time Zone designation for date, time, and date/time values)
- Effective Dating
- Contact Method
- Entity Identifiers
Continuing Work…

• Competencies (version 2)
• Assessments
• Staffing Exchange Protocol (version 2)
• SIDES Enhancements
• Stock Plans
• Data Dictionary
• Background Checking
Where Is There Interest?

- SIDES France: Adecco, Adia, expectra, Kelly, Manpower, VediorBis.
- European Union is funding an “openXchange” pilot program that will implement SIDES within ebXML.
- Dutch ECP.NL group, implementing EU project, has signed an MOU with HR-XML to promote SIDES within the Netherlands and Europe.
- Growing interest in Japan.
- Presented at “eHR China” in 2002; invited to “eHR China” 2003.
HR-XML Workgroups
**Stock Plan**

- **Objective:** Develop schemas for employee stock option and employee stock purchase plan data exchanges. These exchanges may involve employers, plan administrators, brokers, and stock plan participants.

- **Project Participants:** Oracle, SAP, Transcentive, PWC, Charles Schwab & Co, Authoria, Commerzbank, Peoplesoft, Deutsche Bank, eTrade.
Stock Plan

- Project started 2002 Feb 20; version 1.0 approved 2002 Oct 7.

- Version 1.0 included support for Stock Option programs and included five schemas: StockPlan; StockPlanParticipant; Grant; ExerciseRequest; and ExerciseConfirmation.

- Version 2.0 is in progress (2003 July target date); includes support for Employee Stock Purchase Plans (ESPP).
Recruiting and Staffing

Goals for next version of Staffing Exchange Protocol:

- Address problems identified by early adopters.
  - Learn from global base of experience.
- Modularize key components.
  - Support a wider range of business processes.
  - Make the SEP more flexible.
  - Support globalizations such as demographics.
- Incorporate CPO objects.
  - Maximize re-usability and consistency.
Recruiting and Staffing

- Finalizing resume 2.1 recommendation – New modules include:
  - Licenses and Certifications
  - Security Credentials
  - Patent History
  - Publication History
  - Speaking Events
  - Associations
  - References
  - Languages
  - Supporting materials
  - Resume additional items
Recruiting and Staffing

- Finalize Candidate Profile
  - Candidate Preferences
    - Remuneration
    - Travel
    - Relocation
    - Desired Position
    - Language

- Hire message
  - Interface from a hosted recruiting or applicant tracking system and a core HR system.
  - Contains additional data such as start date, and starting salary, among others.
Currently reviewing French recommendations for modifications to the following specs:

- StaffingOrder
- StaffingPosition
- PositionHeader
- WorksiteEnvironment
- HumanResource
- Resume
- EducationHistory
- Rates
- StaffingShift

- Asssignment
  - Frame Agreement
- TimeCard
- StaffingAdditionalData
- StaffingAction
- Organization
  - StaffingCustomer
  - StaffingSupplier
- OrganizationUnit
Metrics

- New project proposal.
- Many ideas discussed, but scope narrowed to developing:
  - A generalized schema to enable the exchange of HR measurement data.
  - A metrics data dictionary.
Payroll

- Payroll Instructions 1.0 enables requests for pre-payroll adjustments and deductions to employee pay. Allows benefit providers to affect employee pay.

- Payroll Benefits Contributions 1.0 enables post-payroll reporting of earnings and contributions to third-party benefits administrators/providers.

- What’s next? Post-payroll register? Payrolls are batch – Batch Response?
Enrollment

Initial design focuses on US-coverage types:
- Tier-based coverages -- such as medical, dental, and vision.
- Spending accounts -- more commonly known as flexible spending accounts (FSA).
- Rate-based coverage -- such as life insurance, short-term disability, and long-term disability.

Adding additional coverage types:
- EmployeeStockPurchasePlan

Examining localization strategies.

Examining relationship between HR-XML and ASC X12N EDI formats.
CPO

- “Cross Process Objects” work group.
- Develops schemas for common HR elements.
- Reviews schemas from other work groups for compliance with the above.
CPO Specifications

- EmploymentHistory
- MilitaryHistory
- ISO Utilities (Gender, Language, Country Codes)
- EntityIdentifier / IdentifierTypes
- Organization
- TaxonomyTypes
- WorkSite
- PersonName
- PostalAddress
- ContactMethod
- New Work: LocationSummary
Time Card

- Simple, flexible mechanism to transmit working time and certain expenses between systems.

- Capable of describing “raw” time worked data (e.g., timestamp data marking beginning and ending points) or “processed” time worked data (e.g., summary data for a day, week, or pay period) and piecework amounts.

- Accommodates expenses such as those that might be incurred by temp staff/contractors, but not generalized expense reporting (e.g., not intended to handle travel expense reporting).
TimeCardConfiguration

- TimeCards contain various elements for which sender and receiver have to know the allowed values (e.g., person identifier, time interval types, additional information such as cost center identifiers, project identifiers).

- TimeCard Configuration allows for “setup information” (e.g., list of person identifiers, list of time interval types, list of project identifiers) to be downloaded to a time capture system.
Organizing HR-XML Internationally
Internationalizing HR-XML

- HR-XML has received numerous requests from individuals and organizations interested in forming country-specific HR-XML “chapters.”
- The HR-XML leadership wants the Consortium to continue to operate as a single organization that produces and approves HR-related specifications of broad international relevance.
- Leadership wants to find effective, responsive, and practical means to involve stakeholders wherever they live.
Organizing Local Chapters

- A first step in working with local initiatives is the identification of local requirements and an assessment of the breadth of support.
- Can the project can be best supported through an HR-XML workgroup or through an ongoing, locally-supported initiative?
Organizing in France

- Initiative to channel French input into SIDES standards and to develop extensions appropriate for France begun in May 2002.
- French have completed review of all SIDES specs and have delivered their requirements/recommendations.
- Most of the recommendations are changes to core specs – not additions of French-specific content.
- A significant number of the changes involve making “required” components “optional.”
Organizing in France/Europe

- French project is initially of limited scope – organized within HR-XML’s conventional workgroup formation methodology.
- Some interest in a broader, European-based, self-supporting initiative, perhaps with EU funding. Board of Directors will be exploring this “European Chapter” with the interested constituencies later this year.
- Other country-specific initiatives: ECP.NL, a Dutch group working on a SIDES demonstration project with EU funding. Swedish Labor Board uses data exchange specifications based on HR-XML’s staffing exchange protocol.
Organizing in Japan

- Much work has been done to identify areas of interest and to identify stakeholders who might be willing to support a Japanese chapter of HR-XML.
- A “Memorandum of Understanding” (MOU) has been drafted to establish a framework of cooperation and coordination between a local Japanese chapter and the HR-XML Consortium.
- Interest in the Japanese chapter operating as a centre of activity for:
  - The identification of Japanese requirements for HR data interchange.
  - The development of extensions to HR-XML’s core specifications.
  - The development of specifications of local interest not yet addressed by the Consortium.
  - The promotion of HR-XML within Japan.
Country-Specific Extensions/Specifications

When are country-specific extensions/specifications necessary?

- When legal requirements dictate. Examples: French employment contract requirements; U.S. requirements with respect to health care continuation coverage (“COBRA”).
- When support for country-specific business practices are missing from base specifications produced by the Consortium.
- In some cases, components in the base schema may need to be removed or made optional for legal reasons.
Overall Goals

- Involve and engage local consistencies.
- Have local groups organize and fund themselves as appropriate under local law.
- Establish a framework of cooperation and coordination between local chapters and HR-XML.
- Work together to produce and approve HR-related specifications of broad international relevance.
- Publish country-specific specifications and extensions as necessary.
- Have local groups cover their direct costs and cover local group’s share of overhead – e.g., maintenance of international standards; promotion of HR-XML; protection of HR-XML “Brand.”
Next Steps: Call to Action!

✓ Support HR-XML.

✓ Support HR-XML Japan.

✓ Get started! Download and pilot one or more of the HR-XML specifications.

✓ Ask your vendors and IT suppliers whether they are implementing HR-XML standards.
Case Studies of HR-XML installations in the USA and Europe

Terry Baker, Hire.com
Chuck Allen, HR-XML Consortium
Agenda

- Recruiting & Staffing Case Studies:
  - Chiron Corporation: Comprehensive HRMS integration
  - Accenture: Resume building
  - Oracle iRecruitment: Resume & background checks
  - ResumeMirror: Resume extraction
  - Allegis Group: Job posting
  - Unicru/Hirecheck: Staffing agency background checks

- Other Standard adoptions underway...
Case Study

Recruiting Challenges:

• High company growth rate mandated the building of a large, high quality private talent community from which they could speed hire.

• Increased recruiter productivity

• Improved employee job satisfaction

• Centralized reporting & tracking capabilities

Source: IOMA HR Dept Management Report May, 2003
Case Study

Goals of the EAI:

• Seamless, real-time integration of new recruiting system with existing SAP HR module.
• Leverage HR-XML standard to reduce cost & effort
• Increased automation to streamline hiring process
• Ensure data integrity between two enterprise systems.
• Aggressive 6 week delivery schedule!
Case Study

Solution:

• Hire.com Recruiting Center
• HR-XML Staffing Exchange Protocol Standard v.1.0
• Hire.com Business Connector
• SAP Business Connector
CHIRON Recruiting Process

External Sourcing Activities

Automated Candidate Communication

Automated Candidate Match, Notify and Qualification

Business Connector (SAP HR Integration)

Successful Hire
Candidate Relationship Process

**Attract** Candidates through Branded Content and Experience

**Capture** Passive Candidates through Quick and Easy Profile

**Build** Relationships through Tailored Correspondence

**Grow** Relationship through Self-Service Candidate Portal
Career Site Statistics

166,000 Visitors to Career site

14.0 % capture rate

23,337 total Candidate Profiles
## Talent Community

### 23,337+ candidate relationships since launch
*Note: 2022 Profiles in Jan ‘03*

<table>
<thead>
<tr>
<th>Metric</th>
<th>Chiron 1/1/02 - 3/31/02</th>
<th>Chiron 4/1/02 - 6/30/02</th>
<th>Chiron 7/1/02 - 9/30/02</th>
<th>Chiron 10/1/02 - 12/31/02</th>
<th>Peer Avg. 10/1/02 - 12/31/02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Candidate Relationship Profiles</td>
<td>2,662</td>
<td>2,693</td>
<td>3,163</td>
<td>3,772</td>
<td>4,860</td>
</tr>
<tr>
<td>Average Monthly Profiles</td>
<td>887</td>
<td>898</td>
<td>1,054</td>
<td>1,257</td>
<td>1,620</td>
</tr>
<tr>
<td>Average Monthly Visitors</td>
<td>8,684</td>
<td>8,848</td>
<td>10,680</td>
<td>12,771</td>
<td>6,895</td>
</tr>
<tr>
<td>Capture Rate</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>18%</td>
</tr>
</tbody>
</table>

*Peer Avg.- 2 Hire.com customers (in same industry and/or location) averages for similar period*
Cost Effective Talent Acquisition

Source of Profiles

- Recruiting Center: 97%
- Match & Notify: 1%
- Refer a friend: 2%

Source of Submissions

- Recruiting Center: 72%
- Match & Notify: 27%
- Refer a friend: 1%

Ending December
High Quality Talent Community

Passive / Active Candidates

When a resume is required for job submission, candidates will convert from passive to active as they apply for specific jobs.
Hire Analytics: Coverage Factor

Potential Coverage
PC = Candidates / X

Coverage = 1.5 1.5 1.6 2.38 17 1.6

*Candidate Reach is based on 100:1 ( # candidates to produce a hire).
98% of the submissions on your site screen-in
366 candidates have been automatically screened-out and notified
## Results

<table>
<thead>
<tr>
<th>Goals</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Seamless Bi-directional integration to SAP HRMS</td>
<td>• Double and triple entry into HRMS</td>
<td>• Cost was 1/10(^{th}) of typical HRMS integration project due to common HR- XML interface</td>
</tr>
<tr>
<td>• Aggressive Six week delivery schedule</td>
<td>• No integration between HR products</td>
<td>• On-time delivery of solution</td>
</tr>
<tr>
<td>• Increase Productivity with less people</td>
<td>• Recruiters spent too much time on administrivia</td>
<td>• Recruiters have one application to work from, not three and centralized reporting and tracking of Talent ensuring data integrity</td>
</tr>
<tr>
<td>• Improve employee job satisfaction within recruiters</td>
<td>• Expensive resources is allocated</td>
<td>• HR-XML interface also provides a recruiting eco-system for integration with other services and applications</td>
</tr>
<tr>
<td>• Streamline process to ensure data integrity and compliance</td>
<td></td>
<td>• Chiron Staffing is the #1 department in customer satisfaction within Chiron because of their efficiencies of scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improved employee job satisfaction</td>
</tr>
</tbody>
</table>
Case Study

Problem: Matching the skills of 70,000 people in 46 countries against highly specialized, technically demanding, and frequently changing requirements of world-wide consulting engagements.

- Solution: A new scheduling system designed to optimize the way it allocates resources to projects. HR-XML’s SEP provides the means to capture rich detail about its consultants’ skills, proficiency levels, and interests.

- All Accenture consultants will use an Intranet-based resume builder tool to create an HR-XML compliant resume.
Case Study

Resume Builder

HR-XML Formatted Resumes

Novient HR-XML Parser

European Novient eServices system

U.S. Novient eServices system

Far East Novient eServices system

Profile Search

Skills
Case Study

Oracle iRecruitment Module includes several interfaces that leverage HR-XML’s Staffing Exchange Protocol specifications:

- An interface to third-party providers of resume parsing solutions sends formatted MS Word, .rtf, .pdf, and HTML resumes and returns the resumes structured within HR-XML’s JobPositionSeeker format, which can be directly imported into the Oracle iRecruitment applicant tracking system.

- An interface to third-party background check provider also uses JobPositionSeeker to pass information required for a background check.
Case Study
Case Study

Problem: ResumeMirror wanted to provide applicant tracking systems and other hiring solution providers an easy way to integrate with its best-of-breed resume extraction tool.

Solution: A hosted resume extraction service that integrates with other applications using web services and HR-XML standards.
Case Study

Problem: Regional staffing firm Allegis wanted to eliminate fees paid to a third-party job posting service and give recruiters self-service capabilities through its own recruitment portal.

Solution: Negotiated with two principal job board partners to integrate with its own recruitment portal, thingamajob.com. Integration was accomplished using HR-XML’s JobPositionPosting specification.
Case Study

- HireCheck – employment screening provider.
- Unicru – provider of hiring management systems for hourly workers
- Their mutual client – a $20-billion dollar national, retail pharmacy co.
- Integration went online March 2003.
1. Unicru / Hirecheck maintain proprietary, multiple, trading-partner specific interfaces.

2. Data quality from “walk-up” applicants and lack of structured exchange format sometimes produce duplicate and errant orders, which costs their mutual customer money.
After:

**Benefits:**

1. Unicru / Hirecheck poised to exploit HR-XML standard with other partners.
2. Better structured, higher quality data enables Hirecheck to better detect and handle duplicate / errant orders.
3. Customer saves money from error reduction and elimination of duplicate orders.
4. As more “eco-partners” adopt standard, Customer has great flexibility to add new searches/services w/o integration costs.

**HR-XML Consortium Background Check Request**

**SOAP Web Service (SSL)**

**Regional HQ**

**Access To Web App (SSL)**

**Email Notice**

**Walk-Up Applications From 1,100+ Locations**

**Unicru**

**Hirecheck**

**Access To Web App (SSL)**
HR-XML adoption accelerating

Ground-breaking implantations under way

Microsoft recently previewed an HR-XML enabled resume creation tool it plans to bundle with a forthcoming version of MS Word

Implementations proceeding with HR-XML’s Stock Option Interface, Enrollment, and other specs.
Questions?

Terry Baker (tbaker@hire.com)
Chuck Allen (chucka@hr-xml.org)
HR-XML: Competencies Update
Chuck Allen, Director, HR-XML Consortium
What is a competency in the context of HR?

What are the conceptual components of a competency record?

What are HR / e-Learning use cases?

What was the goal of HR-XML’s 1.x Competency specification?

What are the priorities for the 2.0 Competency release? What are the issues being discussed in this on-going project?
What is a Competency?

In HR Domain, needed broad and flexible definition that did not depend on difficult distinctions (e.g., the difference between “innate” and “learned” characteristics and behaviorally revealed competencies versus those competencies evidenced by assessments, certificates, or degrees). Essentially, a competency is a measure characteristic relevant to the deployment of a human resource.

**Competency.** A specific, identifiable, definable, and measurable knowledge, skill, ability and/or other deployment-related characteristic (e.g. attitude, behavior, physical ability) which a human resource may possess and which is necessary for, or material to, the performance of an activity within a specific business context.
Competency Conceptual Model*

Competency data may include
- Reusable (generic) **definition** of the competency
- **Evidence** of competency
- **Context** within which the competency is defined, or that defines the competency
- **Dimensions** such as proficiency or level of interest on a scale

* IMS Global Learning Consortium, RDCEO Conceptual Model
Reusable competency definition includes key characteristics – title, identifier, description – but not contextual details.

Much of the value of RDCEOs lies in the fact that they can be referenced within specific contexts.
Competency Conceptual Model: Context

Examples of context:
- Competencies associated with a person – A competencies record. For example, a profile of an applicant
- Competencies associated with a job classification or a position

Context also may include Dimensions:
- A person’s level of interest in the competency
- The importance or weight placed on the competency for a position
Evidence information may include:

- Assessment results
- Audit data: time, date, method of evaluation
- Identification of certification or license authority. Who is the issuing authority?
- Dimensional information on one or more scales
Use Cases

- Evaluating individuals against position requirements by considering assessment and competency records
- Job seeker wants to fill competency gap for desired position. Engages in learning to do so
- Updating individual’s competency records in an HRMS from a LMS
- Systems configuration – exchanging the competency taxonomy required by two systems

Competency Actions

- RECORD
- SEEK
- OFFER
- MATCH
Competencies 1.x

- A simple, practical means to exchange information about competencies within a variety of business contexts.
- Designed for use as “competency record” as well as in setting out competencies requirements.
- Incorporated some notion of a relationship with external competency “taxonomies” or “catalogs,” but resume use case primarily focused on capture of end-user generated competency data.
- Schema design departs from HR-XML schema guidelines – Uses a flat, heavily attributed design. This was thought desirable to limit verbosity and file size (A single resume might have 100 competencies).
Competencies 1.1
Beyond Competencies 1.x …

Priorities include:

- Harmonization with IMS Global Learning Consortium’s Reusable Definition of Competency or Educational Objective (RDCEO)
- A more robust, better-defined way of referencing competency taxonomies or catalogs (Competencies 1.x is a simple structure great for capture of user-generated data such as in Resume context. Possibly maintain a 1.x like structure for simple capture of user-generate data).
- A better means to relate competencies to other competencies; to occupational classifications; to positions; to learning objects and development products
- Modularization of specifications
  - Simplifies complex, cross-domain use of competencies
  - Possible Areas for Modularization:
    - Competency Definition
    - Competency Record (Evidence, Dimensions, Reference to Definition)
    - Taxonomies and Maps
IMS Global Learning Consortium
Reusable Competency Specification

RDCEO – Reusable Definition of Competency or Educational Objective

HR-XML has begun looking at RDCEO and harmonization with e-learning competency models

Why RDCEO?

- A piece of the competency information model shared by e-learning/Human Capital Management
- Breaking out RDCEO simplifies modeling competencies and how they are used within the complex domains of HR and e-learning
- Modularization enables broad reuse
e-learning/HR Harmonization

HR-XML

Definition
<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Explanation</th>
<th>Reqd</th>
<th>Mult</th>
<th>Type</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GUID</td>
<td>Globally Unique Identifier</td>
<td>M</td>
<td>Single</td>
<td>String, GUID</td>
<td>To conform to IMS guidelines</td>
</tr>
<tr>
<td>2</td>
<td>Title</td>
<td>Text label of this RCD</td>
<td>M</td>
<td></td>
<td>LangString</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Description</td>
<td>Description of the Competency</td>
<td>M</td>
<td>Single</td>
<td>LangString</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Definition</td>
<td>Further definition of the competency in accordance with a particular model of competencies</td>
<td>O</td>
<td>Single</td>
<td>Vocabulary</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reference to the Model being used. A sourced vocabulary</td>
</tr>
<tr>
<td>4.1</td>
<td>Model</td>
<td>Identifies the Model being used</td>
<td>O</td>
<td>Single</td>
<td>Vocabulary</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Statement</td>
<td></td>
<td>M</td>
<td>Multiple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2.1</td>
<td>StatementID</td>
<td>A local identifying label for the statement</td>
<td>O</td>
<td>Single</td>
<td>String</td>
<td></td>
</tr>
<tr>
<td>4.2.2</td>
<td>StatementName</td>
<td>Name of the Model Part</td>
<td>O</td>
<td>Single</td>
<td>Vocabulary</td>
<td>For example: Statement, Criteria, or Outcome. The vocabulary should match the Model vocabulary</td>
</tr>
<tr>
<td>4.2.3</td>
<td>StatementText</td>
<td>Statement of the definition</td>
<td>O</td>
<td>Single*</td>
<td>LangString</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Meta-data</td>
<td>Additional IMS Metadata may be incorporated</td>
<td>O</td>
<td>Multiple</td>
<td>IMS Meta-Data Record</td>
<td>The specification give best practice guidance for RCD Meta-data records.</td>
</tr>
</tbody>
</table>
At the heart of the LSDA credit framework is the specification for a **unit of assessment**. This includes:

- **Title** - what the unit is called
- **Learning outcomes** - statements of what a learner can be expected to know, understand and do
- **Assessment criteria** - criteria for judging whether learning outcomes have been achieved
- **Credit value** - based on volume of achievement/notional learning time
- **Notional learning time** - the time taken on average for a learner to achieve a set of learning outcomes at a specified level
- **Level** - the degree of complexity, learner autonomy and range of achievement derived from level descriptors
- **Size** - the extent of learning represented by the notional learning time required to achieve the unit.
Reusable Competency Definition

- HR-XML is looking at aligning with the model developed by IMS Global Learning Consortium
- IMS RDCEO model parallels HR-XML requirements, but IMS XML binding for RDCEO very different from HR-XML designs – Change or mapping approach required
- A representation of the key characteristics of a competency, independent of its use in any particular context. The Reusable Competency Definition would include a title, identifier, identification of any related model, and descriptive statements (see example below).

Title: Originality
Model: ONet Content Model Reference
Identifier: 1.A.1.b.2
Description: The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
Taxonomies / Maps

A taxonomy is a map in the form of a tree that shows relationships between individual competencies. A taxonomy can be organized as a collection of references to reusable competency definitions. Taxonomies show how individual reusable competency definitions can be aggregated to form broader competencies as well as how broader competencies can be decomposed into components. Organizations may have their own taxonomies or "competency catalogs" relevant to their business.

Maps also can show non-hierarchical relationships between competencies. Desire to express relationships such as: Equivalent To; Is Part Of; Has Part; Is Version Of; Has Version; Is Format Of; Has Format; References; Is Referenced By; Is Based On; Is Basis For; Requires; Is Required By.
Competency Record

- A record of a competency possessed by an individual (usually a human resource or learner).

- Would include a reference to the Reusable Competency Definition (if not the definition itself), Competency Evidence, and possibly relevant dimensions such as “level of interest.”

- This is the primary focus of the HR-XML Competency 1.x specification.

- **ISSUE:** How to record competency evidence? Various types of evidence – license; certification; assessment; educational achievements; supervisor’s direct observation; etc. Competency 1.x contains a fairly flexible approach – but the Consortium also has developed schemas to capture metadata for certain types of evidence. Verification processes may require a different level of evidence detail.
Relating Competencies To Jobs/Positions

- A very basic part of Human Resource/Human Capital management is managing relating competencies to job classifications as well as specific positions.

- Our competencies workgroup may examine other relation Consortium schemas for “job” and “position”.
Relating Competencies To Learning Objects

- There are a variety of use cases where a developmental need may be identified (through a pre-employment screening, assessment, or on-going performance evaluations) and where it may be desirable to relate a competency gap to a development tool or product to fill it.

- Examining how related e-learning standards, such as IEEE’s Learning Object Metadata standard, may be relevant to the HR domain.
1.A.1 Cognitive Abilities

1.A.1.b Idea Generation and Reasoning Abilities

1.A.1.b.1 Fluency of Ideas

1.A.1.b.2 Originality

1.A.1.b.3 Problem Sensitivity

1.A.1.b.4 Deductive Reasoning

Title: Fluency of Ideas
Model: ONet Content Model Reference
Identifier: 1.A.1.b.1
Description: The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
Title: Fluency of Ideas
Model: ONet Content Model Reference
Identifier: 1.A.1.b.1
Description: The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
Title: Fluency of Ideas
Model: ONet Content Model Reference
Identifier: 1.A.1.b.1
Description: The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
Title: Fluency of Ideas
Model: ONet Content Model Reference
Identifier: 1.A.1.b.1
Description: The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
Title: Fluency of Ideas
Model: ONet Content Model Reference
Identifier: 1.A.1.b.1
Description: The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
How To Put It All Together?

- HR-XML can’t do it alone!
- Liaison/Work with:
  - Learning Consortia
  - Developers of skills/competency taxonomies
- July 9-11 2003 Meeting with IMS Global Learning Consortium in Boston
Join The Effort! / Influence the Process!

- 2.0 project is in beginning stages
- A project of enormous scope and importance:
  - “Competencies are not merely descriptors of an employee, position, organizational work unit, or training resource; they are the glue that holds together major HR management activities. It is difficult to discuss any major HR management process without the concept of competencies.” Naomi Lee Bloom, Bloom & Wallace
- Join the Effort! / Influence the Process!
Questions?

Chucka@hr-xml.org
Le Tour De SIDES

Chuck Allen, Director HR-XML Consortium, Inc.
2003 May 16
Agenda

- What is SIDES?
- What are the origins of the SIDES initiative?
- What organizations are supporting SIDES?
- What are the business interests driving SIDES development/adoption?
- How does SIDES work? *Le Tour de SIDES*
- How to make SIDES relevant and useful around the World?
- How can you benefit from SIDES?
What is SIDES?

Staffing
Industry
Data
Exchange
Standards
What is SIDES?

- Staffing Industry Exchange Standards
  - A broad set of specifications to enable the eProcurement and management of staffing processes

- SIDES has been built in a modular fashion
  - Quote/Order process
  - Human Resource information
  - Basic request/response communication (Staffing Action)
  - Assignment and rate information
  - Timecard and expense information
  - Invoice
Establishing a Global Standard

- Original sponsors are international staffing providers with global operations – Strong desire to add localization/extensions to enable broad international adoption
- Contributors, so far, have come from the US, UK, France, Spain, the Netherlands and Australia
- Localization initiatives have begun in France, Netherlands
- Much interest in supporting a Japanese initiative
What is SIDES?

- Began with the world’s six largest staffing companies collaborating to create a “strawman” specification
  - Increasing client demands for staffing eProcurement
  - Growth of independent Vendor Management market in North America.
  - Desire to reduce integration costs
What is SIDES?

- Donated a straw model to HR-XML in September 2001 for further refinement and ongoing development
  - Original sponsors have since been joined by HR vendors, other staffing companies and government agencies
- Approved on May 1 2002
Staffing e-Transactions Today

- Automating the procurement of temporary staffing has many potential advantages
- The staffing systems environment is characterized by a great diversity of systems and a lack of agreed-upon mechanisms for integrating data across systems
- Connecting a staffing customer with a single supplier could cost $250,000 USD (or more)
- Connecting a customer with multiple providers could involve millions in integration costs, whether such integration is accomplished directly or through a vendor management solution
Customers’ Viewpoint

CANDIDATE = JOE BROWN
AVAILABLE_DATE = 12 JUL 01

PERSON_SURNAME = BROWN
PERSON_FIRST_NAME = JOE
STARTDATETIME=
12:07:2001:0900:00:00

CONTRACTOR=JOE BROWN
AVAILABLESTART=12/07/01

NOTE:
The information sent back is not standard. Fields are defined differently.

SUBJECT_LASTNAME=BROWN
SUBJECT_FIRSTNAME=JOE
DATESTARTMONTH=JULY
DATESTARTDAY=12
DATESTARTYEAR=2001
What Are the Business Drivers?

- Building and maintaining ‘unbounded’ unique interfaces is expensive for all parties in the supply chain
  - Connecting a staffing customer with a single supplier could cost $250,000 USD
  - Connecting with multiple vendors is extremely expensive whether such integration is accomplished directly or through a vendor management solution

- People are not pencils
  - Many existing supply-chain management frameworks are designed for static inventory items and are not sophisticated enough for complex staffing transactions

- Customer expectations for seamless, web-enabled services continue to grow
Online Recruitment Trends

- The use of online recruiting tools is exploding
  - Estimated annual growth rate of 45% 1999-2005
  - By 2005, 30% of small, 70% of medium, and 100% of large companies will be recruiting online

- Vendor Management market forecast to grow from its current nominal size to $10 billion by 2005

*Source: BA&H Market Study, Forrester Research, ABN AMRO Research, Robert W. Baird & Co., IDC*
What Does SIDES Offer For Staffing Customers?

- Shortened order fulfillment
- Elimination of double-keying data and “phone-tag” scheduling and communications
- Accurate and timely invoicing
- Audit trail for efficient time card and invoice approval
- Opportunities for ‘self-validating’ documents and custom views of invoices and other documents
- Rich and structured data to use in assessing how well candidates match company requirements
What Does SIDES Offer Staffing Companies and Intermediaries?

- Supply chain automation without the high-cost of building custom interfaces
- “Opportunistic” partnering
  - Elimination of integration barriers and lengthy discovery periods for sub-contracting arrangements
- Doesn’t dictate business model or internal processes
  - Allows suppliers to differentiate by building value on top of interchange standards
- Better alignment with emerging technologies
  - Web Services, UDDI, etc
  - Supported by IBM, Microsoft, Sun, and other technology leaders
How Does SIDES Work?

- SIDES was built in a modular fashion
- All modules can be used for full end-to-end processing or modules can be used for component-by-component implementations
- Major components include:
  - Quote/Order process
  - Human Resource information
  - Basic request/response communication
  - Assignment and rate information
  - Timecard and expense information
  - Invoice
le Tour de SIDES
2002 Team News

Behind-the-scenes reports & Team members' comments

Check out the new Special Features page!

June 19, 2002

Heras takes over lead at Catalunya
For the third straight day, a different rider from the United States Postal Service Pro Cycling Team leads Spain's Tour of Catalunya. [ full story ]

June 19, 2002

Chann McRae's Rider Journal
Tour of Catalunya Stages Two and Three Report: Just another couple of days at the office [ Go! ]

June 17, 2002

Team takes team time trial stage at Catalunya; Armstrong, Landis go 1-2 at Dauphiné
One day after Lance Armstrong claimed the Dauphiné Libéré for the United States Postal Service Pro Cycling Team for the second time in three years, the USPS team won today's opening team trial stage at the Tour of Catalunya in Deltebre, Spain. [ full story ]

June 17, 2002

Chann McRae's Rider Journal
Tour of Catalunya Stage One report: A 'poetic' reaction to the team time trial victory [ Go! ]

June 16, 2002
Place an Order
Approve an Order
Review Candidates
Schedule Meetings
Review Assignments
Review/Approve Time
Review/Approve Invoices

PLACE AN ORDER

Order Approval Status: Unapproved
Order Status: Open
Order Type: Temporary
Number of openings: 1
Requisition Number: 123456-TDF2002
Purchase Order: Unassigned
P.O. Amount: Unassigned
Business Unit: Special Events

Order Detail

Position Title: Website Administrator
Position Description: Accompany the USPS race team and update the website with details on the race in general and the USPS team performance and activities in particular

Start Date: 5 July 2002
End Date: 30 July 2002
Estimated: ✔ Actual: 
Maximum Allowable Rate: € 35.00 per hour
Allowable Expenses: Airfare to and from US should be directly billed to USPS. Candidate should contact XYZ Travel to make reservations and reference the PO # on the order. Receipts for meals and miscellaneous travel expenses

Order Summary

CONTINUE
CANCEL
<table>
<thead>
<tr>
<th>Technical Requirements</th>
<th>Level of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML programming</td>
<td>High</td>
</tr>
<tr>
<td>Visual Basic</td>
<td>High</td>
</tr>
<tr>
<td>Level of Proficiency:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interpersonal Requirements</th>
<th>Level of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learns quickly</td>
<td></td>
</tr>
<tr>
<td>Work Independently</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Educational Requirements</th>
<th>Degree</th>
<th>Type</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>Bachelor</td>
<td></td>
<td>Computer Science</td>
</tr>
<tr>
<td>Subject</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language Requirements</th>
<th>Level</th>
<th>Read</th>
<th>Write</th>
<th>Speak</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>Fluent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speak</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process Requirements</th>
<th>Resume Review?</th>
<th>Interview?</th>
<th>Drug Test?</th>
<th>Background Screen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resume Review?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug Test?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Background Screen?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Position Requirements**

**Contact Information**

Order Placed By: Jack Henderson

Date of Order: 06/20/2002

Contact number: 202-555-1212

First day report to: HR Department

Assignment Supervisor: Bob Lincoln

Report to Location: 1234 Pennsylvania Ave, Suite 3200

Worksite Location: Mobile location. Will accompany the TDF team

Primary Supplier: Squarion

Secondary Supplier: Robert Whole
Efficiency #1:
Reduction of time and effort spent on unapproved or unauthorized orders.

Order Approval Status: Approved
Order Status: Open
Order Type: Temporary
Number of openings: 1
Position Title: Website Administrator
Position Description: Accompany the USPS race team and update the website with details on the race in general and the USPS team performance and activities in particular
Start Date: 5 July 2002
End Date: 30 July 2002
Rate Range: € 32.00 to € 35.00 per hour
Allowable Expenses: Airfare to and from US should be directly billed to USPS. Candidate should contact XYZ Travel to make reservations and reference the PO # on the order. Receipts for meals and miscellaneous travel expenses

Enter override code
CANCEL CONTINUE
SIDES Staffing Order Document
Send an Order
ORDER - Imported

Order Number: 02468
Order Source: MARK V  CSMS
Source Order ID: 123456 TDF 2002
Client Name: US Postal Service
Client ID: USPS 6543
Bill to Contact Name: Jack Henderson
Bill to Contact Address: Dept. of Disbursement / 5678 Pennsylvania Ave / Washington DC / USA / 00234
Client PO Number: TDF2002 789
Client PO Amount: € 5,000
Job Title: Website Administrator
Order Status: Approved
Start Date: 07/03/2002
Est. End Date: 07/30/2002
Position: 1 of 1
Position ID: 02468-01
Job Description: Accompany the US Postal Service race team and update the website with details on the race in general and the USPS team performance and activities in the race.
Min Rate: € 32.00
Max Rate: € 35.00
Work Environment: Mobile location. Will accompany the Tour de France race team along the racecourse in the US Postal Service transport vehicle

Skill requirements:
- HTML Programming: Advanced, Code: 2A1c
- Visual Basic: Advanced, Code: 2A1e
- Learns Quickly: Code: 3C1a2
- Works Independently: Code: 3C1b3

Other requirements:
- Requirement Type: Degree
  Requirement Detail: BS - Computer Science
- Requirement Type: Language
  Requirement Detail: French - Read / Speak
- Requirement Type: Passport
  Requirement Detail: Valid
- Requirement Type: Drug Screening
  Requirement Detail: 10-Panel - negative result

Additional Detail:
Assignee will enter time records on vendor's web timekeeping system

Contact1 name: Jack Henderson
Contact1 Type: Order Placed By
Contact1 Info:
<table>
<thead>
<tr>
<th>Employee Name</th>
<th>Doug Ellenberg</th>
<th>Employee Name</th>
<th>Ellen Douglas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Number</td>
<td>999-99-9999-de</td>
<td>Employee Number</td>
<td>888-88-8888ed</td>
</tr>
<tr>
<td>Address</td>
<td>321 Yankee Doodle Highway</td>
<td>Address</td>
<td>1313 Mockingbird Lane</td>
</tr>
<tr>
<td>City</td>
<td>Arlington</td>
<td>City</td>
<td>Washington</td>
</tr>
<tr>
<td>State, Zip</td>
<td>VA 22204</td>
<td>State, Zip</td>
<td>DC 20002</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Phone1, Type</td>
<td>802-555-5555 Home</td>
<td>Phone1, Type</td>
<td>202-888-8888 Home</td>
</tr>
<tr>
<td>Phone2, Type</td>
<td>202-555-0000 Mobile</td>
<td>Phone2, Type</td>
<td>202-888-0000 Mobile</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:dellenberg@email.com">dellenberg@email.com</a></td>
<td>Email</td>
<td><a href="mailto:edouglas@email.com">edouglas@email.com</a></td>
</tr>
</tbody>
</table>

**SKILLS**
- HTML Programming
- Visual Basic
- French - Fluent

**ASSIGNMENT HISTORY**
- 03/01/02 – 06/30/02 Customer A / Excellent
- 12/15/01 – 02/25/02 Customer B / Excellent
- 08/05/01 – 12/12/01 Customer C / Excellent
- 07/02/01 – 07/31/01 USPS / Excellent
- 03/05/01 – 10/12/01 Customer Y / Excellent
- 09/04/00 – 02/27/01 Customer Z / Excellent

**AVAILABILITY**
- 7/3/02 – 7/30/02 - Open
- 7-3-02 – 7-30-02 - Open
- 07/02/01 – 07/31/01

**OTHER CRITERIA**
- Negative Drug Screen within 30 days
- Negative Drug Screen within 30 days

**PROPOSED RATE**
- € 25.00
- € 20.00

Slight differences yield different rates.
SIDES HumanResource Documents
Submit Candidates
### POSITION REQUIREMENTS:

<table>
<thead>
<tr>
<th>Candidate Name: (Click to review profile &amp; resume)</th>
<th>Technical Requirements:</th>
<th>Interpersonal Requirements:</th>
<th>Educational Requirements:</th>
<th>Language Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANDIDATE 1: DOUG ELLENBERG</td>
<td>HTML programming</td>
<td>Learns quickly</td>
<td>Degree</td>
<td>French</td>
</tr>
<tr>
<td>CANDIDATE 2: ELLEN DOUGLAS</td>
<td>Visual Basic</td>
<td>Work Independently</td>
<td>Bachelors</td>
<td>Fluent</td>
</tr>
</tbody>
</table>

- **Technical Requirements:**
  - HTML programming
  - Visual Basic

- **Interpersonal Requirements:**
  - Learns quickly
  - Work Independently

- **Educational Requirements:**
  - Degree: Bachelors
  - Subject: Computer Science

- **Language Requirements:**
  - French: Fluent

**Cost:**
- CANDIDATE 1: € 32.00 - 35.00 per hour
- CANDIDATE 2: € 38.00

**Other:**
- Did this assignment for the 2001 TDF with an excellent performance rating
SIDES StaffingAction Document

Request - Schedule Interviews

Interviews Wednesday.
Ellen at 3:00pm and
Doug at 4:00pm
SIDES StaffingAction Document
Response - Confirm Interview Schedule
SIDES StaffingAction Document
Request - Rate Negotiation

Want Doug, but can only pay €38.00.
SIDES HumanResource Documents
Candidate Selection
<table>
<thead>
<tr>
<th><strong>Assignment Information</strong></th>
<th><strong>Customer Billing Information</strong></th>
<th><strong>Include in export?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employee Name:</strong> Doug Ellenberg</td>
<td><strong>Customer Name:</strong> United States Postal Service</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Employee Number:</strong> 999-99-9999-de</td>
<td><strong>Customer Number:</strong> USPS 6543</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Address:</strong> 321 Yankee Doodle Highway</td>
<td><strong>Billing Contact:</strong> Jack Henderson</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Address2:</strong></td>
<td><strong>Billing Address:</strong> Dept. of Disbursements</td>
<td>☐</td>
</tr>
<tr>
<td><strong>City:</strong> Arlington</td>
<td><strong>Billing Address2:</strong> 5678 Pennsylvania Avenue</td>
<td>☐</td>
</tr>
<tr>
<td><strong>State, Zip:</strong> VA 22204</td>
<td><strong>City:</strong> Washington</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Country:</strong> USA</td>
<td><strong>State, Zip:</strong> DC 20007</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Phone1, Type:</strong> 804-555-5555 Home</td>
<td><strong>Phone1, Type:</strong> 202-555-1111 Office</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Phone2, Type:</strong> 202-555-0000 Mobile</td>
<td><strong>Email:</strong> <a href="mailto:disbursement@usps.gov">disbursement@usps.gov</a></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Email:</strong> <a href="mailto:dellenberg@email.com">dellenberg@email.com</a></td>
<td><strong>Customer PO #:</strong> TDF2002-789</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Customer Req #:</strong></td>
<td><strong>Bill Rate – Regular:</strong> €38.00 per hour</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Bill Rate – OT:</strong></td>
<td><strong>Bill Rate – OT:</strong> €57.00 per hour over 40/week</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Pay Rate-Regular:</strong></td>
<td><strong>Pay Rate - OT:</strong> €24.00 per hour</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Pay Rate - OT:</strong></td>
<td><strong>Expenses:</strong> Must have receipts to be reimbursed</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Expenses:</strong></td>
<td><strong>Meals:</strong> Allowed up to €35.00/day</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Meals:</strong></td>
<td><strong>Misc. Travel:</strong> Necessity must be reviewed</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Misc. Travel:</strong></td>
<td><strong>Air &amp; Lodging:</strong> Provided by USPS</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Air &amp; Lodging:</strong></td>
<td><strong>Preassignment Screening Expense:</strong> Bill at cost</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Preassignment Screening Expense:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Start Day:</strong> 03/07/2002</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>End Date:</strong> 30/07/2002</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Department:</strong> Special Events</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Work Hours:</strong> Variable - 4 hours/day, 7 days/week</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Work Site:</strong> Multiple locations in France</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Supervisor:</strong> Bob Lincoln</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Time Approver:</strong> Bob Lincoln</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Drug Screen:</strong> Completed - met requirement</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Background Check:</strong> Completed - met requirement</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>Passport:</strong> Completed - met requirement</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td><strong>First Day Report to:</strong> HR Department</td>
<td></td>
<td>☐</td>
</tr>
</tbody>
</table>

**Send/Save Assignment**
Week 1 is completed
### Enter time for the week of: July 1, 2002 - July 7, 2002

**Employee Name:** Doug Ellenberg  
**Employee ID:** 999-99-9999de  
**Customer:** US Postal Service  
**Assignment ID:** 02468-01

<table>
<thead>
<tr>
<th>Day</th>
<th>Time In</th>
<th>Time Out</th>
<th>Total Hours</th>
<th>Reg. Hours</th>
<th>OT Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>1600</td>
<td>2100</td>
<td>5.00</td>
<td>5.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td>0900</td>
<td>1850</td>
<td>9.50</td>
<td>8.00</td>
<td>1.5</td>
<td>Set up, testing, etc.</td>
</tr>
<tr>
<td>Friday</td>
<td>1500</td>
<td>2200</td>
<td>7.00</td>
<td>7.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>1450</td>
<td>2100</td>
<td>6.5</td>
<td>6.5</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td>1400</td>
<td>2100</td>
<td>7.00</td>
<td>7.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>35.00</td>
<td>33.5</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Expenses**
- **Meals:** €206.52
- **Misc. Travel:** €47.15

---

**Submit Time**
The Pay/Bill Cycle
SIDES Extended Timecard - Week 1

USPS is invoiced for Doug’s Time & Expenses for Week 1
SIDES Business Process

Order & Quote
- Create Order
- Submit Order

Submission & Selection
- Submit Acceptance
- Select Staffing Resource
- Evaluate Staffing Resource

Assignment
- Receive Acceptance
- Propose Staffing Resource
- Evaluate Staffing Resource

Time Capture
- Temp Populates Timesheet
- Customer Approves Timesheet

Invoicing
- Submit Payment
- Receive Invoice

Reporting
- Receive Report
- Generate Report

- Receive Order
- Receive Order
- Receive Acceptance
- Matching
- Create Assignment
- Submit Assignment
- Create Timesheet
- Process Timesheet
- Submit Timesheet
- Payroll
- Billing
- Generate Report
- Receive Timesheet
- Submit Invoice
Can Your Company Benefit from SIDES?

- Will the unbounded growth of unique interfaces affect your bottom line?
- Could integration ‘friction’ prevent your Company from moving forward with new business and new partnerships?
- Will your Company be increasingly burdened with keeping diverse systems glued together?
- Would you like your IT infrastructure to support true eBusiness and opportunistic partnering?
How Can You Take Advantage of SIDES?

- Taking advantage of HR-XML SIDES does not have to cost your Company anything
- Encourage your software vendors and IT solution providers to support HR-XML SIDES
- Encourage them to become members of the HR-XML Consortium

*Join in an initiative to develop localizations/extensions for Japan*
HR-XML SIDES provides a staffing-industry created and maintained solution for clients, staffing firms, intermediaries, software vendors, and systems integrators that:

- Will dramatically reduce the costs of integration
- Will promote the more rapid development of application program interfaces
- Is centrally maintained by the HR-XML consortium
- Is already the core of major integration projects
- Is freely available without license fees or royalties
Questions?

http://www.hr-xml.org/sides/

Chuck Allen, chucka@hr-xml.org

For further information: AskSides@HR-XML.org