

April 8, 2011
Interactive Program Guide, Inc.

Main EPG System “MINDS” Upgrade

Database for uniform consolidation of nationwide broadcasters’ TV program data and related content

Interactive Program Guide, Inc. (Based in Chuo-ku, President: Keisuke Toji, “IPG”) will be upgrading its main EPG system, “MINDS (Meta Information Distribution System).”

“MINDS” refers to the database for uniform consolidation of broadcasters’ official program data (“SI”^(※1)) collected from SI collectors’^(※2) at broadcaster stations nationwide, and other TV-related information generated and collected by IPG. Following several version updates since the release of “MINDS” in December 2006, Ver. 2.3 will be released with this upgrade. In addition, with the release of this upgrade, the “Yahoo! TV.G-GUIDE” portal service provided jointly by Yahoo Japan Corporation and IPG will completely link its system to the MINDS database, and from March 31, all TV information and relevant content will be utilizing “MINDS” data.

■“MINDS” Features

1. Developed based on nationwide official program information (SI)

The only system in Japan that has the ability to collect eight days worth of future SI, real-time, and distribute updated SI as frequently as every five minutes.

The current program data handled by “MINDS” is as follows:

- Terrestrial broadcast data
- BS broadcast data
- CS 110 (Sky Perfect e2)

2. Thorough ID management and linking of relevant data

The ID management of all data allows linking up SI with relevant data for various programs.

#	Item	Description	Operation	Utilization
1	Name Master	A. Names and profiles from “Japan Talent Database” B. Names of cast members in program C. Top ranking names for “G-GUIDE Mobile” searches	<ul style="list-style-type: none"> ● Profile info from Japan Talent Database will be added to top ranking G-GUIDE Mobile name searches ● Data provided according to user search needs and various spellings of talent names, by managing nicknames, common spelling typos etc. of applicable names for A, B, and C 	<ul style="list-style-type: none"> ● “Name ID” allows improved program searches based on cast names, as well as richer expressions with talent images and profile information.

			<ul style="list-style-type: none"> ● “Name ID” issued after identifying which cast will appear in which program based on names extracted from data by MINDS engine 	
2	Program Master	A. ID for identifying program series B. ID for integrating programs broadcast over several regions	<ul style="list-style-type: none"> ● Identifies identical programs even with different program names according to episode or region. “Program ID” issued for incidental management of both series (past, present, and future programs) and nationwide regions 	<ul style="list-style-type: none"> ● For national drama series, same “Program ID” issued according to episode and region. “Program ID” allows linking episodes before and after in a series, and uniform management of relevant content linked to national programs.
3	Program Related Content	A. Pictures linked to programs B. Program description C. Official program URL	<ul style="list-style-type: none"> ● Registration systems released to broadcasters and content providers for registrations of A, B, and C 	<ul style="list-style-type: none"> ● System features allows easy registration of SI and linking of relevant data. Linking feature allows rich expression of SI by adding images etc.
4	Broadcaster Information	A. Broadcaster logo B. Official URL	<ul style="list-style-type: none"> ● Uniform management of A and B provided by broadcasters 	<ul style="list-style-type: none"> ● Allows display of broadcaster logos and official URLs on TV listings page

3. Flexible Data Distribution

All data for 1. and 2. are distributed using Web-API XML. The API includes various parameters in taking into account usage scenes. In addition, there are other features that allow resizing and cropping of files, as well as specifying background color.

4. Monitoring of Data Distribution

A monitoring scheme for “MINDS” data distribution is built-in within the “MINDS” system.

Especially with regard to SI, monitoring is carried out for accuracy of data for developing the TV listings, at both the collection and distributions points. In addition, an operational organization is in place to readily handle any revisions when data affecting development of the TV listings is discovered.

■ “MINDS” Time-line

December 2006 System development

October 2008 ver.2.0 Database renovated to improve convenience

June 2010 ver.2.1 All infrastructure renovated to improve performance

January 2011 ver.2.2 ‘Program master system’ based on SI released.

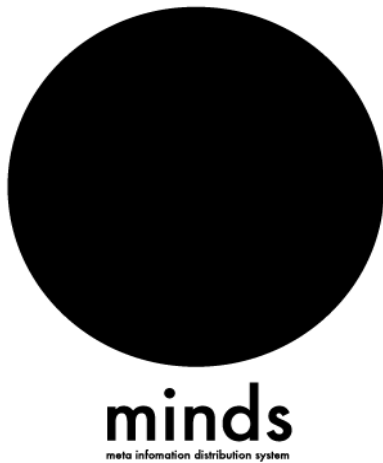
March 2011 ver.2.3 ‘Name master system’ released.

IPG will continue to generate and distribute data that contributes to program viewing, through the data mining of meta data of TV programs, as well as log data of various services deployed by IPG. In addition, IPG will continue to work on improving the convenience of TV information services, by further strengthening its “MINDS” database.

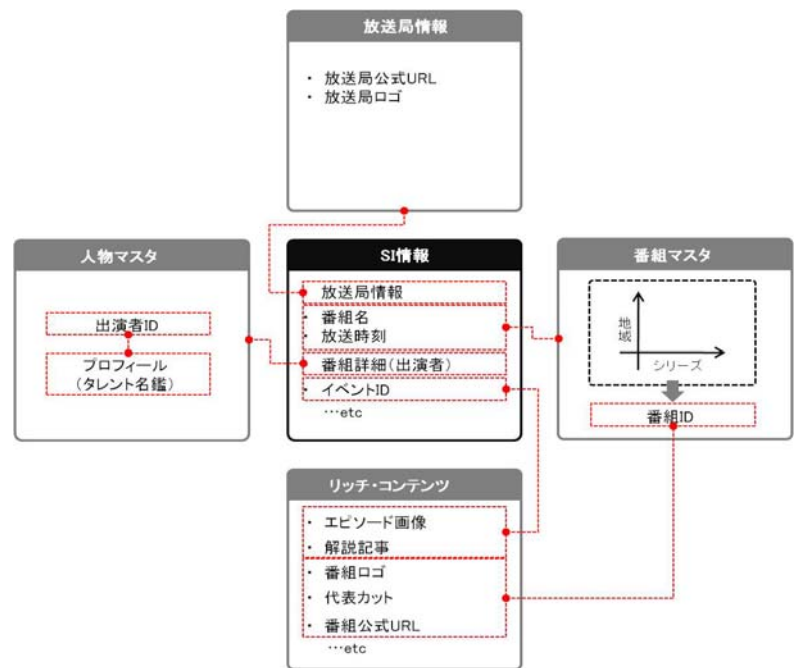
◆ System Name

MINDS
(Meta Information Distribution System)

◆ Logo



◆ Data Structure



G-GUIDE refers to the EPG service based on Rovi Corporation’s technology.

G-GUIDE products are deployed and promoted in Japan by Rovi and IPG.

(※1) SI (Service Information)

SI consists of information necessary for viewing digital broadcasting, and EIT (Event Information Table), which includes program titles, broadcast times, cast etc.

SI is updated as needed with the most recent program information, including updates in broadcast times.

(※2) SI Collectors

SI collectors refer to the devices that SI on a real-time basis acquire from the OA broadcast waves of broadcasters and distribute them after transforming data into files. Nationwide SI collection is realized by setting collectors in broadcast stations in 55 regions (54 terrestrial digital stations, 1 BS Digital station).