GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

NO.2001/TGI/20/P/Internet Tkg.System

New Delhi
6th Sept. 2002

To
The General Managers
All Zonal Railways.

(Commercial Circular No.75/2002)

Sub: Extension of Internet Ticketing System

A pilot project for booking of tickets on internet has been successfully implemented in Delhi Area. Ministry of Railways have decided this should be extended to the following areas in order of priority:-

1. Chennai
2. Mumbai
3. Secunderabad
4. Bangalore
5. Howrah.

After that it should be taken up at Pune, Ahmedabad, Kanpur, Agra, Patna, etc and eventually covering all important stations (A class stations), within a time frame of six months, as desired by MR.

Before taking up the expansion plan, IRCTC should also ensure that delivery of tickets from PRS counter is enabled in Delhi Area at important locations.

Zonal Railway should earmark the specific Railway counter to be operated by IRCTC or Indian Railway as mutually decided for collecting the tickets by passengers. These collection counters should be properly furnished with bright signage bearing the logo of IRCTC and IR. If Railway staff is provided on such counters, they should be properly trained in customer care and should be very courteous and polite. This should be ensured. **Printing of tickets will be done only in the city where ticket is distributed, so as to keep check on accountal of ticket rolls.**

Zonal Railways may please get in touch with IRCTC to work out detailed modalities.

All facilities for enabling internet ticketing including appropriate space be provided to IRCTC on usual terms and conditions.

Procedure Order and Internet Booking Manual was circulated vide Commercial Circular No. 41/2002 dated 24.5.2002 to be followed by Zonal Railways. However, a copy of the same is again enclosed herewith.

Please acknowledge the receipt of this letter.

(Dr.P.K. Goel)
Executive Director Passenger Marketing

Copy to:-
Chief Commercial Managers, All Zonal Railways.
Managing Director/CRIS, Chanakyapuri, New Delhi.
Managing Director/IRCTC, Bank of Baroda Bldg, Parliament Street, New Delhi.

Enc: Two

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

NO.2002/TGI/20/P/IRCTC/ INTERNET New Delhi
24.5.2002

To

The Chief Commercial Managers
All Zonal Railways.

(COMMERCIAL CIRCULAR NO.41/2002)

Sub: **Reservation on Internet through IRCTC.**

A Joint Procedure Order for Reservation on Internet through IRCTC is enclosed herewith along with Internet Booking Manual. This is in pursuance of MoU signed between Ministry of Railways and IRCTC.

The IRCTC will maintain all books and returns as prescribed by Traffic Accounts Office.

At the end of each day complete statement of transactions of total bookings through IRCTC will be generated which will give total fare excluding commission/service charges levied by IRCTC.

Separate roll number for the tickets be allotted for ticket rolls issued to IRCTC.

A rolling settlement scheme i.e. lump sum amount deposited by IRCTC in the account of Railways and its progressive reduction as per individual transaction may be put in place through the software which should also be checked manually.

The topping up as well as reduction of the IRCTC account should also be checked by the software.

Ten days statement of actual money deposited by IRCTC viz-a-viz the debit raised due to transactions may be sent to Traffic Accounts Office on regular basis for cross check.

Ten days statement of actual money deposited by IRCTC viz-a-viz the debit raised due to transactions may be sent to Traffic Accounts Office on regular basis for cross check.

The software developed by CRIS should be thoroughly checked by Manager, Data Base/PRS and Dy.CAO/TA before making the system on line.

The procedure for reservation, modification, cancellation is described in the enclosed procedure order which should be scrupulously followed. Other working arrangements are given in the Internet Bool ng Manual, a copy of which is also enclosed herewith.

This issues with concurrence of Finance and Accounts Directorates of Railway Board.

Please acknowledge the receipt of this letter.

(Dr.P.K. Goel)
Executive Director Passenger Marketing

DA: 1.Procedure Order
2.Internet Booking Manual

No.2002/TG I/20/P/IRCTC/INTERNET

NEW DELHI
24.5.2002

Copy to:
FA&CAOs, All Zonal Railways.
Directors (Audit), All Zonal Railways.

For Financial Commissioner, Railways

Copy forwarded to:
MD/IRCTC, New Delhi.
CCM(PM)/Northern Railway
GM(PRS)/CRIS, New Delhi.

JOINT PROCEDURE ORDER FOR INTERNET BOOKING

1. In pursuance of Railway Board's directive to IRCTC vide letter No. 2001/C&IS/PRS/Internet Booking dated 30.10.2001 to provide internet based advance train reservation booking facility to rail users, the following working procedure order is issued for information and strict adherence by all concerned.

2. IRCTC shall be allowed access to the Indian Railway PRS system for advance reservation on behalf of their customers and all necessary assistance as is being extended to a new PRS centre/user shall be extended by all concerned.

3. The facility shall be extended to individuals on their registration with IRCTC on mutually agreed terms and conditions as prescribed by the Corporation. To control misuse of the facility by unscrupulous elements, IRCTC shall impose such restrictions as are considered necessary on the number of tickets to be purchased by each registered customer and also monitor individual transaction closely. To start with a maximum of 4 transactions per month be permitted on each card.

4. The computer system to be procured by IRCTC for internet booking shall be housed in the IRCA building at the site earmarked and mutually agreed upon by CCM/PM/NDLS and MD/IRCTC. CCM/PM/NDLS shall provide necessary connectivity to IRCTC system and also to the peripherals viz., terminals and ticket printers located at IRCTC printing centres. Cost for this will be borne by IRCTC.

5. CCM/PM/NDLS may assist IRCTC in getting 64 KBps leased land line from DOT to connect the printing centres to the PRS. IRCTC, in that case, shall pay the necessary charges for the equipments, connectivity etc. To begin with, 16 terminal ports may be allocated to IRCTC with related equipment and connectivity. (PLEASE SEE ENCLOSED DIAGRAM). 8 ports dedicated for printing will be connected by dedicated leased line to the IRCTC printing office. The other 8 ports will be provided in the IRCTC office in IRCA Building, ground floor-two to serve as enquiry ports, one for downloading accounting and reconciliation reports and the others as standby for ticket printing in case of any failure of communication between PRS & IRCTC printing office. This may be later reviewed in the light of traffic volumes. Connectivity to IRCTC shall not be withdrawn without prior permission of Board and advice to IRCTC.

6. Tickets to be used by IRCTC for internet booking will have "E-ticket" and "no cash refund" printed on them. They may also be of a different color to distinguish them from normal CPTs. CCM/PM/NDLS shall arrange to print the above distinctly colored tickets and supply them to IRCTC under clear acknowledgement. Separate serial number of ticket should be allotted to the tickets roll issued to IRCTC. This will not only be helpful in differentiation but proper continuity and accountal of tickets by IRCTC.

7. All Internet reservation transactions will have a new ticket type 'U'.

8. For ticket printing , there is a separate special function form. The validations will be on the PNR number and the unique 10-digit transaction ID Printing will be allowed only once and the ticket printed flag is set. There is another separate special function to reset the "printed" flag, in case re-printing is to be done. Only two such resets are allowed. "No refund" message will be printed on all such tickets.

9. By default, the option of printing tickets issued by IRCTC will be given to all counters of IRCTC.

10. Cancellation will only be allowed after ticket is printed. No cash refund will be given. The amount will be reflected in the credit card field in the transaction summary in the DTC. It can be recognized as IRCTC transaction on the basis of ticket type 'U'. Cancellation will be done as it is done in CONCERT by entering PNR number and Stock number.

11. A specific accounting report will be given for cancellation transaction. It will contain transaction ID and PNR number and the refund amount. Credit card number is not given by IRCTC to PRS backend. Hence, this number will not be in the CRIS database. A report that will correlate transaction ID and the credit card number will have to be provided by IRCTC.

12. IRCTC has been given the code of "RC".

13. No concessions, except senior citizen concession, will be allowed. This check is done at backend.

14. No quota, other that ladies and general quota, will be allowed. This is also checked at backend.

15. No other functionality through Special Functions will be allowed initially, except clause 25.

16. Account adjustment as a result of cancellation should be done online.

17. Even for partial or full modification, these will be treated at par with cash transactions since money has already been received in advance from IRCTC by IR which is part of the software.

18. The working of the counter will be from 8 AM to 8 PM on week days and 8 AM to 2 PM on Sundays as for present PRS.

19. The IRCTC will maintain all books and returns as prescribed by Traffic Accounts Office.

20. Payments for the tickets booked by IRCTC to Indian Railway shall be through a lump sum deposit which shall be recouped periodically as and when the deposit reaches a specified cut off level. The above lump sum deposit may be Rs.20 lakhs initially and the cut off level may be Rs. 2,00000/- (Two Lakhs) As and when the cut off level of Rs. 2,00000/-, (Two Lakhs) is reached, IRCTC shall renew the deposit. IRCTC's Account will be credited by suitable entry into the software as soo as cheque is received by CCM/PM. CRIS shall provide the software for handling the IRCTC's transactions and keep the detailed account. Dy. CCM/Data Base/PRS and Dy.CAO/TA should evolve a proper procedure for the purpose of accountal of the cheque received from IRCTC.. Under no circumstances the ticket shall be printed if cut off level reaches i.e. Rs.2,00,000.

21. IRCTC shall devise an effective system for levying the ticket fare from its customers through payment gateway/credit card/e banking etc. and the service charges to be levied from customers shall be decided by IRCTC based on market conditions. IRCTC shall also devise a system for delivery of tickets to customers through couriers or other convenient modes as deemed fit and convenient.

22. To begin with, direct reservation on payment of full fare for adults and children, and on concession fare to senior citizen, against General and Ladies quota from one station to another station on the route of a train shall be issued through internet booking.

23. The following services shall not be provided in internet booking to begin with:-

1 Group booking and foreign tourist booking
2 Name change, boarding point change
3 Booking on passes, military/police warrants, travel coupons, I.C. Passes, Indrail passes,

24. CRIS shall provide the facility through software for, IRCTC to print the tickets as and when and where required by IRCTC by inputting the PNR and transaction ID and printing location code. To handle situations where the ticket is damaged/smudged or otherwise becomes unusable during the printing process, reprinting facility shall be provided to IRCTC through a supervisory privilege. The damaged tickets in such cases will be sent to CCM/PM/NDLS by IRCTC for onward submission to Traffic Accounts. For damaged tickets as indicated or unprinted tickets, the normal procedure as in the case of 'non issued' tickets shall be followed.

25. In case of lost tickets the duplicate ticket may be prepared at PRS as per normal procedure with usual charges collected in cash.

26. The present PRS timings for advance booking shall be maintained for internet booking also.

3.

27. The ticket rolls will be handed over by CCM/PM after taking signature of authorised official of IRCTC, who will keep the rolls in secure manner. IRCTC will send monthly returns for ticket rolls used alongwith details of transactions to CCM/PM and Traffic Accounts Office.

28. Monthly returns of number of transactions passenger, earnings, complaints, appreciation will also be sent to CCM, FA & CAO (TA) and EDPM.

29. Inspection/checking of procedure and accountal by the official of Commercial and Accounts of the Railways at IRCTC will be done, as is being done in non railways terminals.

30. At the end of the day, the system may generate a statement of transactions for total bookings through IRCTC. This statement should show distinctly the total fare excluding commission/service charges levied by IRCTC.

31. The Refunds on the tickets issued by IRCTC on internet shall also be granted by Railway counters who will issue only a cancellation advice to the passengers. A report will be generated both in CCM/PM's office as well as in IRCTC system for all such refunds. After this the passengers shall apply to IRCTC for granting the refund which will be following the normal procedure of refunds on credit cards. To facilitate check of refund sheet, a copy of refund statement on the basis which the refunds will be made will also be sent by CCM/Refund to Traffic Accounts Office.

32. To start with, maximum four transactions are permitted in a month for an individual.

33. Decision regarding number of transactions to be permitted during peak and non-peak period will be taken after seeing the response from the public.

34. Regarding permission for booking on internet for Corporate Sector, decision will be taken in due course.

(Dr.P.K. GOEL)
EDPM

(A.K. Bhatnagar)
EDFC

STRICTLY CONFIDENTIAL

(FOR OFFICIAL USE ONLY)

INTERNET BOOKING MANUAL

INDIAN RAILWAYS

PREFACE

Consequent to the presentation before Hon'ble MR on 7th September, 2001 regarding mandate of IRCTC-in which one of the projects was web enabling of rail reservations-MR had directed that Board should take early decisions on the issues raised. Thereafter, Board directed IRCTC to make a presentation to the Board (CRB/MT/FC) on Internet based reservation.

1. On 15.10.2001, IRCTC made a presentation to Board (CRB,FC,MT) for developing and implementing a web based interface to the passenger reservation system so as to enable rail reservation by customers through the Internet. The IRCTC would in effect provide the "gateway" to the PRS system for customers wanting to access the PRS through the Internet.

2. Board vide letter dt. 30.10.01 approved the scheme of Internet based reservation by IRCTC and commissioning of Phase-I of the Project by May, 2002.

3. Work commenced immediately and the IRCTC will adhere to the target laid down by Board.

PROJECT DOCUMENT

The salient features of IRCTC's project for Internet based Rail Reservations as approved by Board (CRB/MT/FC) are as under:

1.1 IRCTC will provide Web access to the PRS on all India basis.

1.2 Access will be provided to individuals as well as to corporate service providers on mutually agreed terms.

1.3 Guaranteed connectivity will be ensured by IR

1.4 Services provided will be enquiry and reservation initially

1.5 Ticket printing will be at IRCTC's premises & the distribution will be IRCTC's responsibility.

1.6 Payment by IRCTC to IR will be lump sum advance payment which will be run down for each transaction and the balance will be renewed when it reaches a specified cut off level. A prior trigger point may be defined at which intimation is given to IRCTC to replenish the amount.

1.7 Payments from customers to IRCTC will be electronic.
IRCTC will be free to levy a service charge, determined by market conditions, on their customers.

Scope of the proposed system is as under:

RESERVATION

2.1 Comprehensive reservation services are sought to be provided to customers. This implies that the following services should be available:-

1. Reservation from one station to another station on a train route (except to stations at which the train stops for operational/technical reasons) on payment of fare due (general and ladies quota option may be provided).
2. Issue of through tickets to any cluster station defined in PRS with onward reservation facilities.
3. Break journey facilities with onward reservation.
4. Group booking and foreign tourist booking
5. Reservation for multi lap journeys detailed.

2.2 Provision of comprehensive services is dependent on the development of necessary procedures and backend software components.

Initially reservation services as indicated in Item –1 above and foreign tourist booking may be provided. On stablisation of the system (three months-six months) services as indicated in Items 2,3 and 4 may be provided. Services in item 5 may be considered thereafter.

3.1 CANCELLATION, MODIFICATION, CONCESSION TICKETS, SPECIAL FUNCTIONS

Comprehensive services in this regard are sought to be provided. However, since this is dependent on development of necessary procedures and software upgradation, the following phasing is suggested.

CANCELLATIONS

3.2 Initially, no cancellations will be provided on the net. Cancellation of E-booking tickets should be done through PRS counters. Refund in cash will not be granted at PRS counters. It is suggested that for cancellation, the unique Transaction ID that will be generated by IRCTC and sent and stored in PRS for every successful reservation through IRCTC, be asked for by PRS. Since the transaction ID will be known only to the customer, this will be a check against fraudulent cancellation.

3.3 Cancellation can be done on any PRS counter by presenting tickets in original.

3.4 No cash refund will be given to the passenger.

3.5 After cancellation of reservation the operator will issue a cancellation ticket / receipt to the passenger.

3.6 The PRS will generate a report of all IRCTC issued tickets that are cancelled on the previous day showing total fare minus cancellation charges and net amount to be refunded. This report will be forwarded to IRCTC every day by the system.

3.7 The cancellation of tickets can be done on all PRS counters from 08.00 A.M. to 08.00 P.M. on weekdays and from 08.00 A.M. to 14.00 hrs. on Sundays. On closure of computer counters at 08.00 P.M on weekdays and at 14.00 hrs. on Sundays, the passenger may approach for cancellation at refund terminals provided at certain stations. Such cancellations through the refund terminals are allowed only for tickets available for travel on the same day and upto 12 Hrs. on the following day. Tickets for journey on future dates should be cancelled on the system at general PRS counters during normal working hours. In case refund terminals are not available due to any reason, the

passenger may cancel his reservation manually in train charts and get Ticket Deposit Receipt (TDR) and apply for refund to IRCTC.

IRCTC will consolidate all such refund requests on TDR and submit the same to CCM (refunds) requesting sanction for refund.

3.8 On receipt of previous day cancellation report from CCM (PM)/sanction for refund from CCM (Refunds) in case of refund request on TDR, IRCTC will grant refund electronically to the passenger. In case of credit card, refund will be arranged as credit to the customer's card through payment gateway. If the customer had paid via inter account transfer using e-banking, the same route will be used to transfer the amount of refund due, to his account. IRCTC will advice CCM (PM) and CCM (Refund) that refund has been done.

The amount refunded daily by IRCTC as per the above refund reports may be credited to IRCTC's lump-sum advance already available with Railways and the net balance updated daily.

3.9 In case of night trains leaving between 21.00 hrs. and 06.00 (actual departure) the cancellation will be done within the limit specified or within four hours after the opening of reservation office whichever is later.

3.10 "NO CASH REFUND" should also be printed on all tickets issued through internet.

3.11 The processes indicated above may be enabled in software, where required.

3.12 **MODIFICATION**

Initially no modification of tickets will be permitted on the net. Provision for this facility should be made on the system to be enabled at a future date.

3.13 **CONCESSIONS**

Initially, no concessions, except Sr. citizen concession, will be offered. Booking on different type of concession certificates, passes, I-cards for MPs, Indrail passes, military/police warrants will not be entertained.

SPECIAL FUNCTIONS

3.14 Request for change of name on reserved tickets, change of boarding point, issue of blank paper ticket, extention of waiting list , booking to a station over riding distance restriction will not be allowed initially. Once system stabilizes, some special functions will be considered.

3.15 Lost ticket indication may be set at IRCTC and at any Railway PRS counter as per normal rules. Duplicate ticket will be issued only at PRS counters after collecting prescribed charges.

PRINTING AND DELIVERY OF TICKETS

4.1 For ticket printing at IRCTC premises terminals will be located at IRCTC premises connected to the PRS system and printing will be interactive i.e. the PNR and a unique transaction ID (10 digit) will be entered and the ticket will be printed at the IRCTC end. To handle situations where the ticket is damaged/smudged or otherwise becomes unusable during the printing process, a supervisory privilege to enable reprinting the ticket has to be given to IRCTC and a procedure for submitting the damaged ticket to the Railways will be put in place.

4.2 Ticket delivery will be through courier initially. Subsequently, collection centers, self-service kiosks and other means of distribution will also be implemented. The option of permitting a passenger to collect tickets from designated counter (s) in PRS centres on submission of PNR & transaction ID will also be enabled.

4.3 For delivering tickets in major Metros the facility for printing in these Metros is required. This will be provided. The requisite code for the Metro where printing is required will be sent with the reservation request. This facility will be provided once the system stablizes after launch, and with approval of Board.

4.4 In case of ticket lost in delivery or by customer, IRCTC should be given the privilege [only for tickets issued by IRCTC] to impose lost ticket tag and also to release tag if ticket is found. Such facility should be available at any Railway PRS counter also. This may be done in a subsequent stage. Duplicate ticket will be issued only at PRS counters.

4.5 A report including details of every transaction undertaken, shall be generated in PRS and sent to IRCTC server daily for purposes of reconciliation. IRCTC will do daily reconciliation and sort out discrepancies with CCM/PM office.

4.6 General Enquiries-such as Availability of Accommodation, Fare, Current Status of PNR, trains available between a pair of

Station and Time-table queries will be available on IRCTC's web-site.

4.7 The procedure of advance payment for reservation, running down of the balance with each transaction and a detailed accountal of the process will be enabled in back end software of PRS as well as in IRCTC's system.

4.8 To control misuse of the system by unscrupulous elements restrictions will be placed on the number of reservations that a user can undertake in a given period of time. Monitoring of user- wise transactions over fixed periods- weekly, fortnightly, monthly, will be undertaken by IRCTC on a regular basis and any aberrations will be acted upon, if necessary by stopping all transactions by defaulting users. IRCTC will send monthly report to CCM in this respect.

4.9 A comprehensive data base of customers and their transaction particular will be maintained. Once the data base is significantly large and is likely to yield useful information on travel patterns, data ware housing and data mining tools will be used for analysis. Reports thus generated will be sent to the concerned Zonal Railway and to the Railway Board. An effort will be made to graduate it to CRM by integrating user response, so as to enable IR and IRCTC to increase their future business.

SECURITY

6.1 Two firewalls - one to protect the web server & the other to protect the internal corporate network. The first will shield all but HTTP requests & the second will shield all but RTR requests.

6.2 The CPU number of the machine on which RTR client is running will be used as authentication. The number will be collected via low level C call.

6.3 Only registered users can make use of the site.

ANNEX. I

Business Use Cases for Internet Ticket Booking for IRCTC

Overview

Introduction The objective of this process is to enable booking train tickets through internet for IRCTC. Use Cases for a process describe how various users interact with the system to do their work. A Use Case is developed for each major function to be addressed in the process, which describes what the user does under ordinary circumstances to carry out the specified function and also describes what the user does when an exception occurs and how the system is expected to respond.

Use cases involved in process Booking ticket through Internet for IRCTC

ID	*Use Case Name*	*Use Case Summary*	*Dependency*
1	*Registration for Individuals*	Individual customer can register in IRCTC website to make use of Internet ticket booking facility	
2	*Registration for Corporate*	Corporate Customer (Travel Agent) can register in IRCTC website to make use of Internet ticket booking facility for its customers	
2a	*Creation of Corporate Accounts*	Creation of Corporate Accounts after review and approval of applications submitted through IRCTC website	2
3	*Planning a trip*	Planning a trip before the actual process of booking a ticket	
3a	*Book ticket*	Actual ticket booking	3

The screen shots serve to indicate the process flow and functionalities available. The appearance of the pages is subject to change.

Use Case: Registration for Individuals

Use Case Name	Registration for Individuals
Project Use Case Iteration State	Draft
Summary	User registers for the first time in IRCTC LTD. website
Primary, Secondary Actors	User – who now wants to register for Internet Ticket Booking
Basic Steps	1. The User clicks the link "Individual" under "Register" Section in the Left Navigation Bar of the Home Page 2. The User fills all the information requested in the registration form. 3. The User Presses the "Register" button, which creates an individual user account with the requested User ID and Password. 4. On successful creation of the above the User is taken to the Login Page. An E-Mail is sent to the User's mail id containing user –id / password details
Alternative Paths	When a Site Visitor Clicks "Book My Trip" under "Services" option the Visitor is forced to login. Optionally in the same page a link "New user? Sign Up!" is provided for Individual / Corporate Registration.
Exception Paths	If already a user is registered with the same User ID, the registration page with information filled by the user is shown again with an appropriate error message displayed at top of the Page
Extension Points	None
Pre Conditions	None
Post Conditions	An individual User account with a unique User ID and Password as requested by the user is generated in the system
Trigger	User comes Internet to register for Internet Ticket Booking
Related Business Rules	None
Priority	Core
Issues	None
Author / Project	IRCTC Dev. Team – IRCTC Phase I
Date	29th January 2002.

CONNECTIVITY :PRS--IRCTC(IRCA)-IRCTC(OFFICE)

The diagram shows the three blocks segregating the following components:-

1. IRCTC-IRCA: IRCTC's computer systems and related infrastructure which will be located in IRCA Building on ground floor.

2. PRS: Computer system & related infrastructure located in First Floor, IRCA building in Delhi . The VMS server and firewall [Provided by IRCTC] is also hosted on first floor.

3. IRCTC-OFFICE Printing terminals & other infrastructure located in Bank of Baroda Building, New Delhi.

Thus, 1,2,3 will be referred as IRCTC-IRCA, PRS and IRCTC-OFFICE .

IRCTC-IRCA and PRS will be connected on LAN network through VMS server hosted for this purpose and transaction will be routed through a firewall.

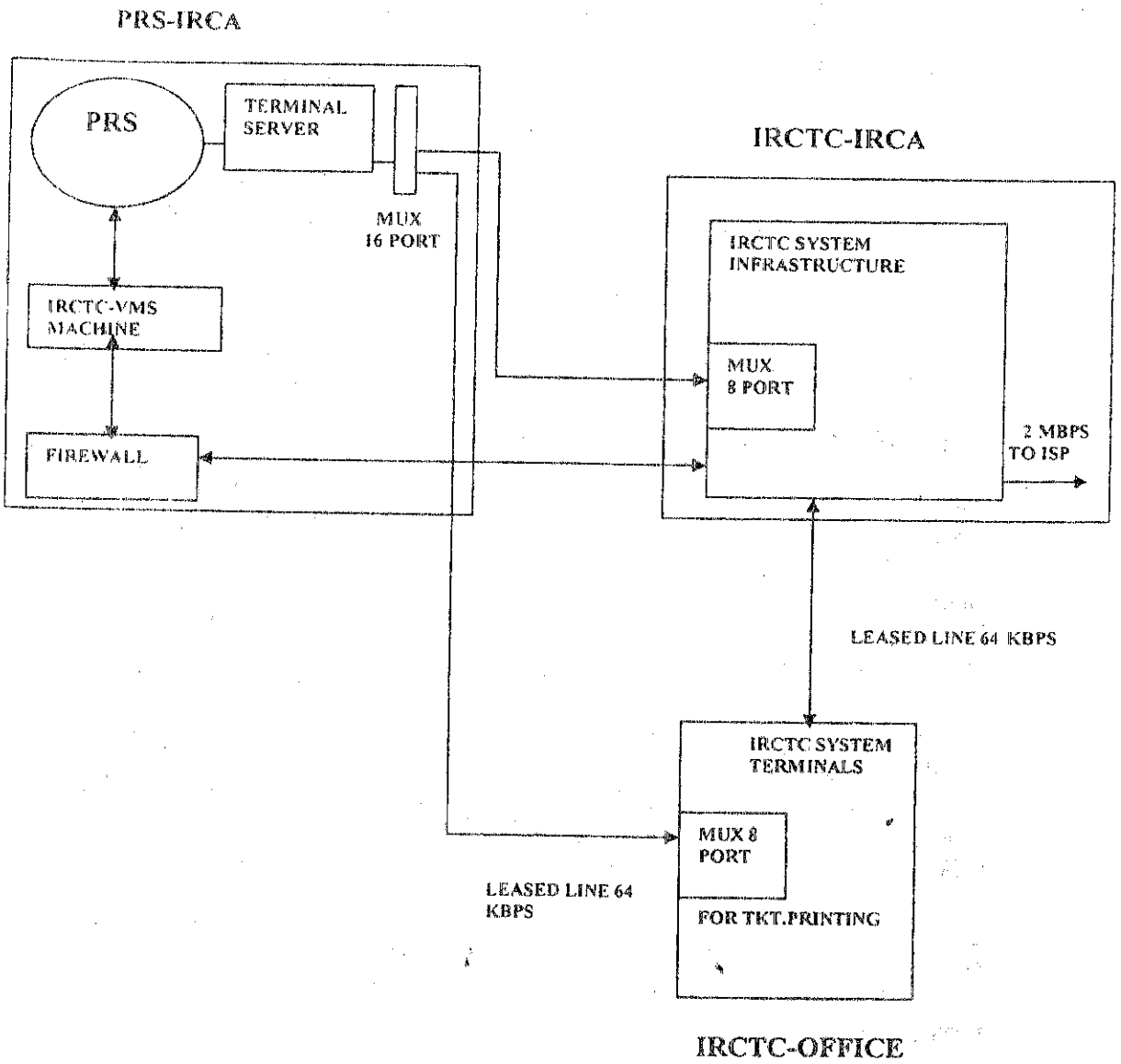
Ticket printing will be done in IRCTC-OFFICE and serial ports will be extended through modem and muxes from PRS, Delhi. Railways to allocate 16 ports for this purpose to IRCTC.

Out of these 16 ports, 8 ports will be extended from PRS to IRCTC-OFFICE directly as terminals extended to various PRS booking locations, through a dedicated 64 K leased line for ticket printing. The communication channel cost, modem and muxes cost will be born by IRCTC. Balance 8 ports will be extended to IRCTC-IRCA.

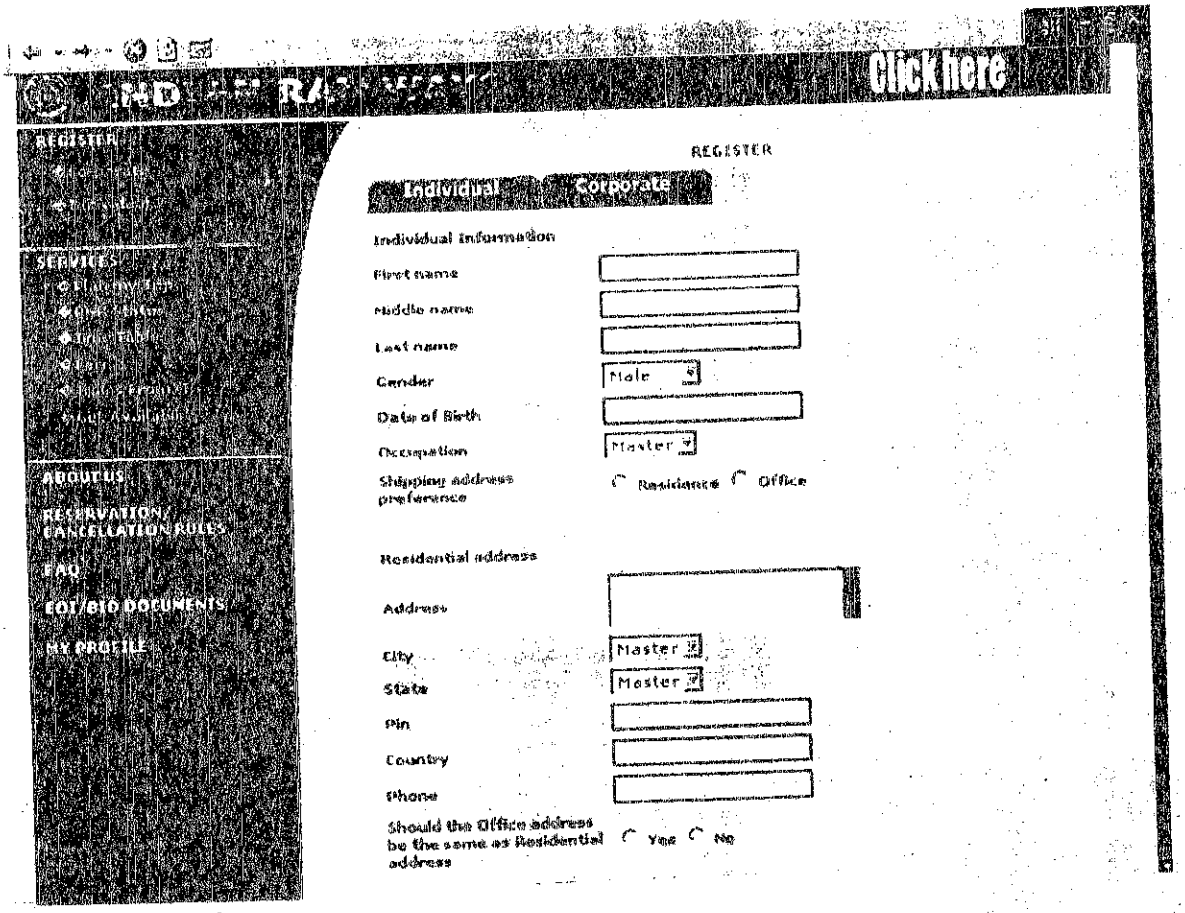
IRCTC-OFFICE will have one more 64 K dedicated channel connected directly to IRCTC-IRCA for system monitoring & administration.

IRCTC-IRCA will connect to outside world through an ISP.

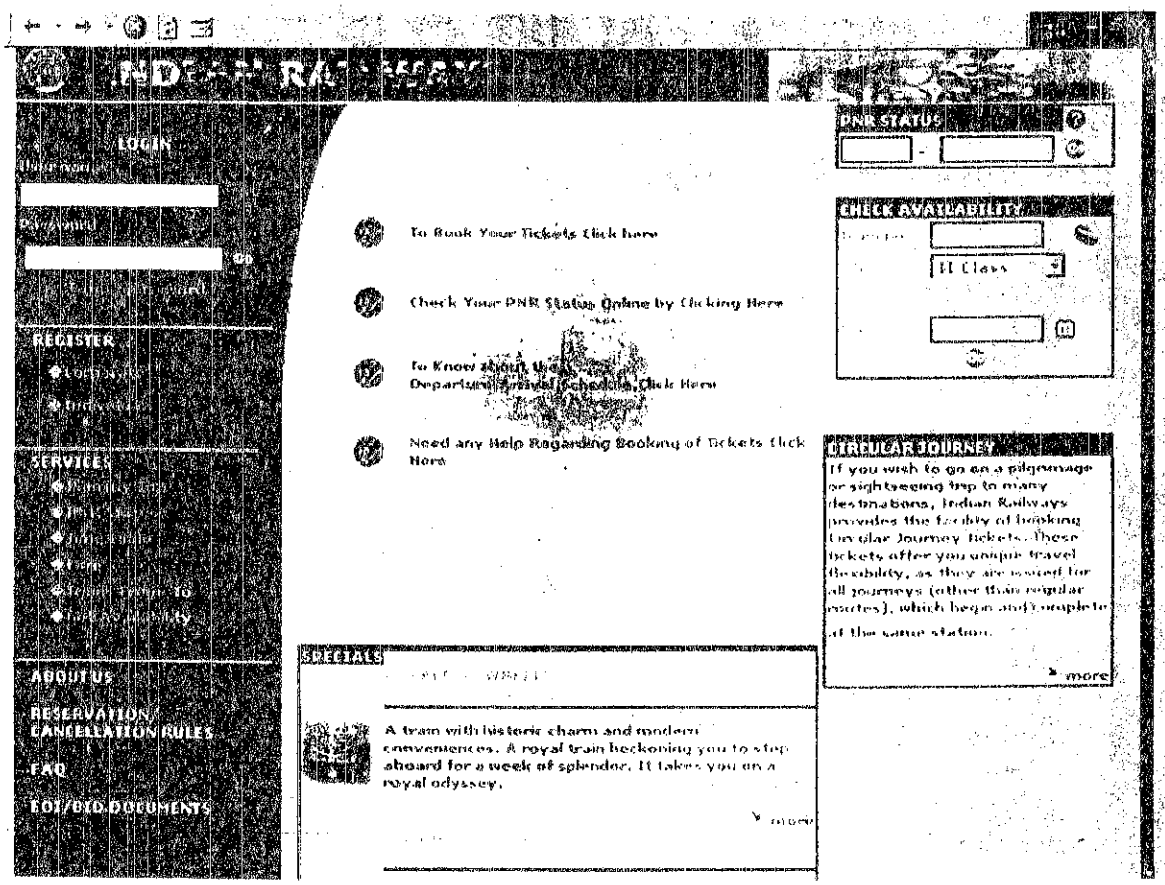
CONNECTIVITY:PRS--IRCTC(IRCA)--IRCTC(OFFICE)



Individual Registration Page



Home Page


LOGIN
REGISTER
SERVICES
ABOUT US
RESERVATION/ CANCELLATION RULES
FAQ
EOI/OTD DOCUMENTS
PNR STATUS
CHECK AVAILABILITY
II Class
To Book Your Tickets Click here
Check Your PNR Status Online by Clicking Here
Need any Help Regarding Booking of Tickets Click Here
CIRCULAR JOURNEY
If you wish to go on a pilgrimage or sightseeing trip to many destinations, Indian Railways provides the facility of booking Circular Journey Tickets. These tickets offer you unique travel flexibility, as they are issued for all journeys (other than regular routes), which begin and complete at the same station.
more
SPECIALS
A train with historic charm and modern conveniences. A royal train beckoning you to step aboard for a week of splendor. It takes you on a royal odyssey.
more

Use Case: Registration for Corporate

Use Case Name	Registration for Corporate
Project Use Case Iteration State	Draft
Summary	A Corporate Customer registers for the first time in IRCTC LTD. website
Primary, Secondary Actors	User – A Corporate Customer now wants to register for Internet Ticket Booking
Basic Steps	1. The User clicks the link "Corporate" under "Register" Section in the Left Navigation Bar of the Home Page 2. The User fills all the information requested in the registration form. 3. Optionally the user can click the link "Terms & Conditions" to view the details of terms and conditions involved in Corporate Registration. 4. The User Presses the "Register" button. On successful process of the online application by the system a confirmation page is shown stating, "Your requisition number is XXX. Your request for Corporate Registration is accepted and being under Process. Kindly meet the IRCTC officials with the above requisition number in anyone of the nearby IRCTC centers below to complete the process of Registration"
Alternative Paths	1. When a Site Visitor Clicks "Book My Trip" under "Services" option the Visitor is forced to login. Optionally in the same page a link under User Name and Password "New user? Sign Up!" is provided for Individual / Corporate Registration.
Exception Paths	None
Extension Point	None
Pre Conditions	None
Post Conditions	Application is registered in the system
Trigger	A Corporate User who comes to the IRCTC website
Related Business Rules	None
Priority	Core
Issues	None
Author / Project	IRCTC Dev. Team – IRCTC Phase I
Date	29th January 2002.

Corporate Registration Page

Palace on Wheels

REGISTER

Individual | Corporate

Corporate Information

Corporate name

Address

City

State

Pin

Country

Phone

Corporate Admin Details

Admin Name

Admin Designation

Address

City

State

Pin

Country

Phone

Commencement of Contract 29 / January / 2002

End of Contract 29 / January / 2002

Additional Information

Industry Sector Advertising and Marketing

No. of Employees

Other Information

Register | Print version | Cancel

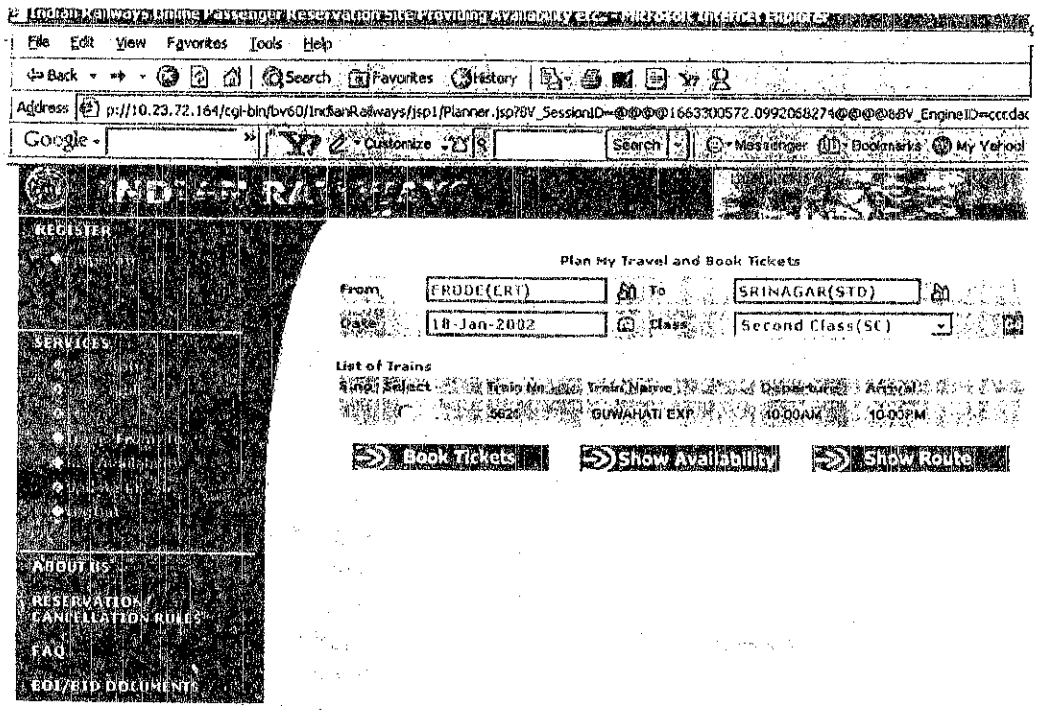
Use Case: Creation of Corporate Accounts

Use Case Name	Creation of Corporate Accounts
Project Use Case Iteration State	Draft
Summary	On successful processing of an online application a corporate account is created
Primary, Secondary Actors	IRCTC Website Corporate Account Manager
Basic Steps	1. The User enters the "User Name" and "Password" under login section in the home page and presses "Go" 2. The User clicks the link "Applications for Corporate Registration" under "Admin" Section, which presents all online applications created through IRCTC website 3. The User can pick an application or search for an application by application number / status, which in turn presents the details of the application 4. On completion of other Business formalities the User can Click the Button generate "Corporate Account" to create a corporate account (A 6 char length account id and password) on basis of the data provided by the applicant. On successful creation of the account the User sees a screen where Corporate Name, Address Corporate Admin ID Password and any other additional info are presented in a printer friendly format 5. The User clicks the link Print to generate the PIN mailer which can be sent to the Customer or can take a print out and hand over in person to the corporate person in charge
Alternative Paths	None
ception Paths	The User after choosing a particular application in step 3 can Edit / Delete the application using the link "Edit" / "Delete" at the top of the application detail page.
Extension Points	None
Pre Conditions	The Admin Section and its links are presented only to the user who has permissions to Administer the IRCTC Site
Post Conditions	Successful Creation of a corporate account
rigger	A Corporate person who applies through IRCTC website for Internet booking
elated Business Rules	None
iority	Core
ues	None
thor / Project	~~IRCTC Dev. Team – IRCTC Phase I~~
e	29th January 2002.

Use Case: Planning a trip

Use Case Name	Planning a trip
Project Use Case Iteration State	Draft
Summary	A registered user can plan for a trip by selecting a suitable train for the desired From, To, Date of Travel and Class. Optionally he can see the availability, route and fare for the trains falling under the above criteria to choose one among them
Primary, Secondary Actors	A registered IRCTC user
Basic Steps	1. The User enters the "User Name" and "Password" under login section in the home page and presses "Go" 2. On successful login the user is taken by default to the Planning Screen. 3. The User can type first few letters of station name and click the search button nearby to get the List of Stations starting with the letters input by the user in a list box in a pop up window 4. Optionally the user can directly click the search button which open the Pop-Up window where the user can search for the train by inputting the first few letters of station name 5. From the list of stations the user can choose a station of his choice which in turn fills the From / To fields 6. After entering the date of travel and class the user hits "Go" to get a list of trains satisfying the search criteria. 7. The User can choose a particular train and then Book Ticket / Check the availability / View Time Table using the respective buttons provided.
Alternative Paths	None
Exception Paths	None
Extension Points	None
Pre Conditions	The User should be a registered user of the IRCTC Site
Post Conditions	None
Trigger	A corporate / individual registered user who is intended to book ticket through internet
Related Business Rules	None
Priority	Core
Issues	None
Author / Project	IRCTC Dev. Team – IRCTC Phase I
Date	29th January 2002.

Planning Page

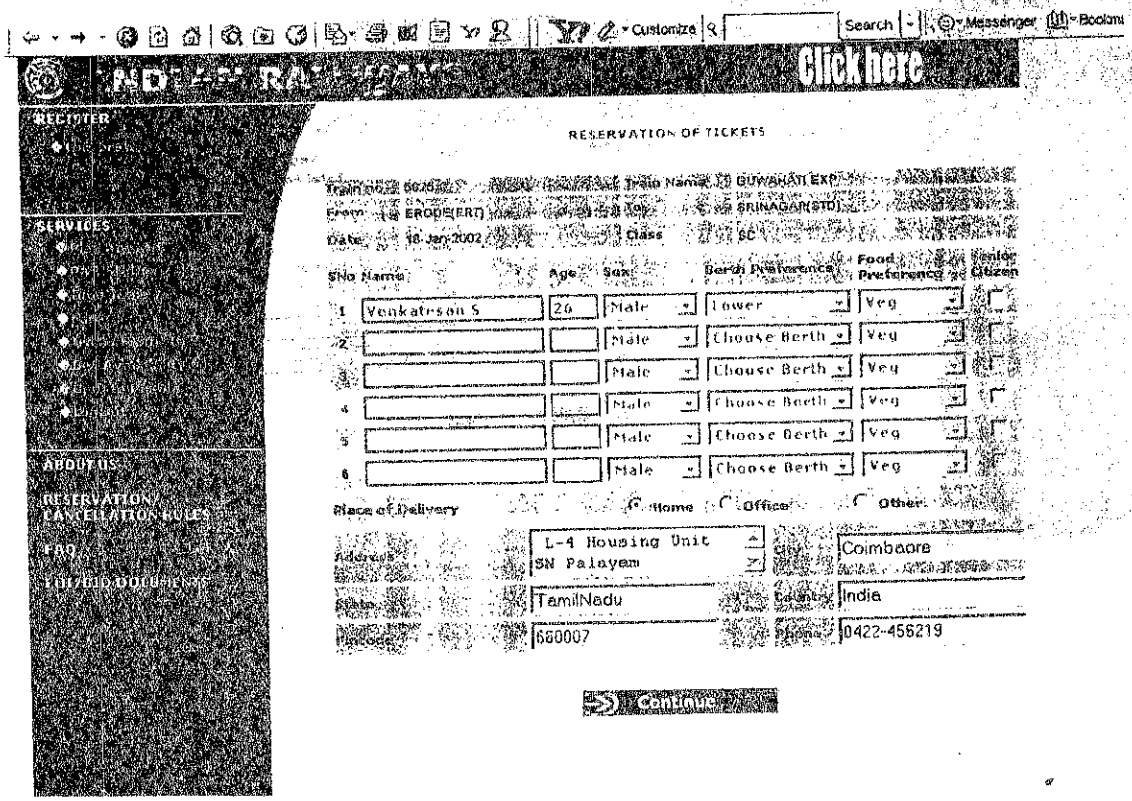


Use Case: Book Ticket

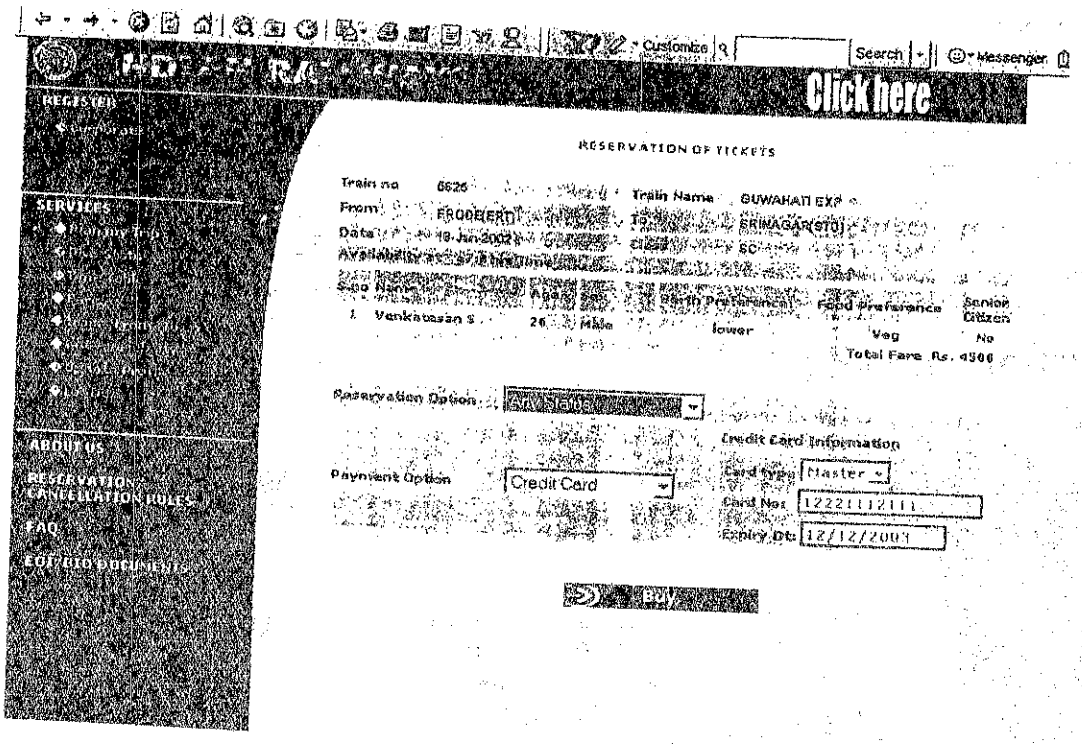
Use Case Name	Book Ticket
Project Use Case Iteration State	Draft
Summary	A registered user after selecting a train in the planning process can book ticket for the same
Primary, Secondary Actors	A registered IRCTC user
Basic Steps	1. The User selects a train from the list of trains shown in the planning page and clicks book ticket. 2. The user is taken to the "Reservation screen I" where the User has to enter passenger details preferences Concessions if any and choose a place of delivery from the options Home / Office / Others 3. If the User chooses Home / Office, address details are pre – filled from the profile information. If it is others the User enters the ticket delivery address 4. The User then presses the "Continue" button to go to Reservation Page II where the user is presented with Availability at the time the user hits "Continue" Button in Reservation Screen I and the Total Fare for the ticket 5. The User chooses Reservation Option / Payment Information and clicks "Buy" to make the actual purchase of ticket 6. On receipt of successful payment authorization for the Payment Option chosen by the user, booking ticket is done in PRS and Money is collected through payment interface. 7. On Success of the entire process the details of booked ticket are shown to the User.
Alternative Paths	None
Exception Paths	If authorization fails display appropriate error message and abort the booking process. If booking fails for the desired reservation option show appropriate message and give a link to planning page If payment collection fails, set appropriate payment status for the ticket so that it can be retried later by IRCTC payment administrator and in turn takes needed actions.
Extension Points	None
Pre Conditions	The User should be a registered user of the IRCTC Site
Post Conditions	None
Trigger	A corporate / individual registered user who is intended to book ticket through internet
Related Business Rules	None

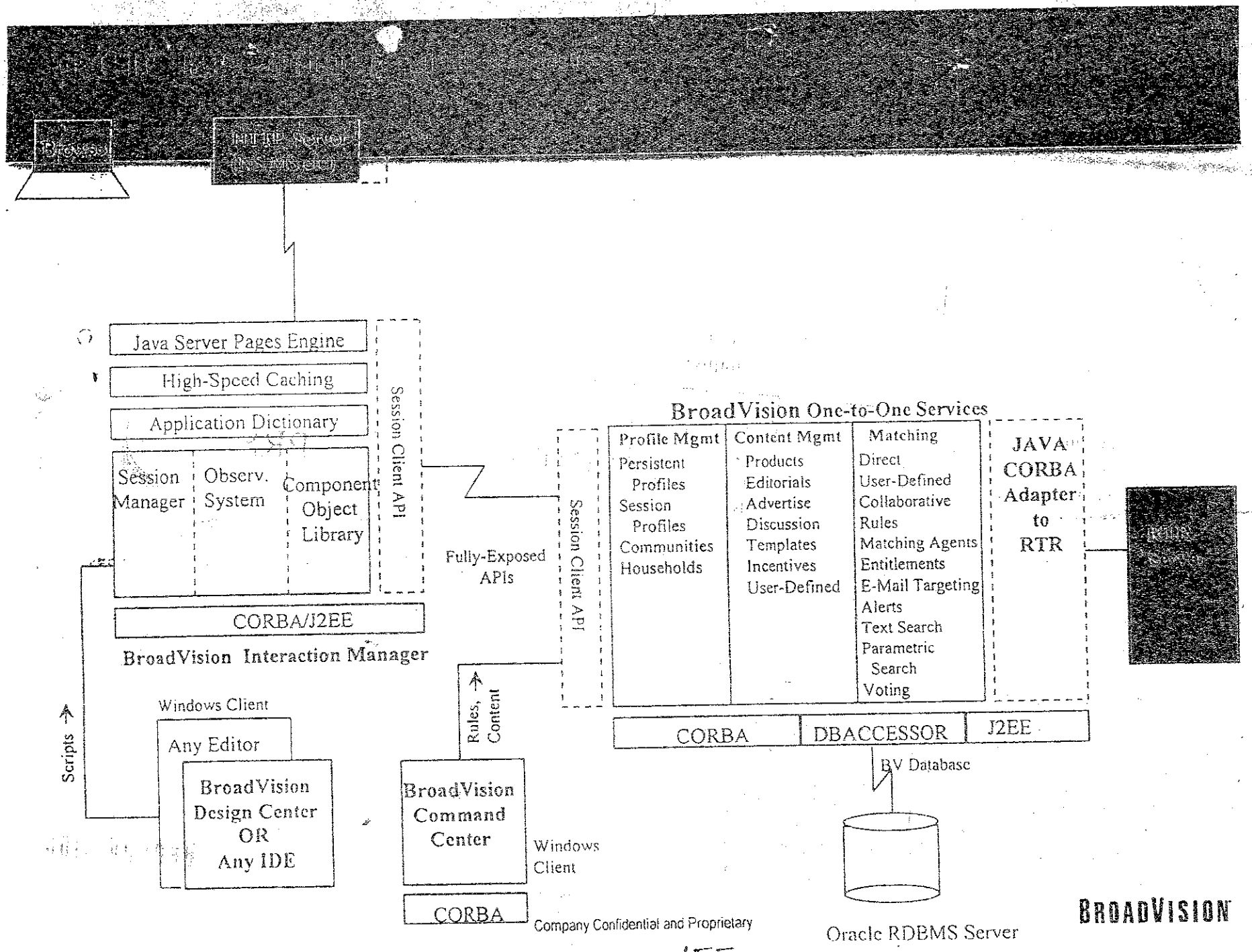
Priority	Core
Issues	None
Author / Project	IRCTC Dev. Team -- IRCTC Phase I
Date	29th January 2002

Reservation Screen I

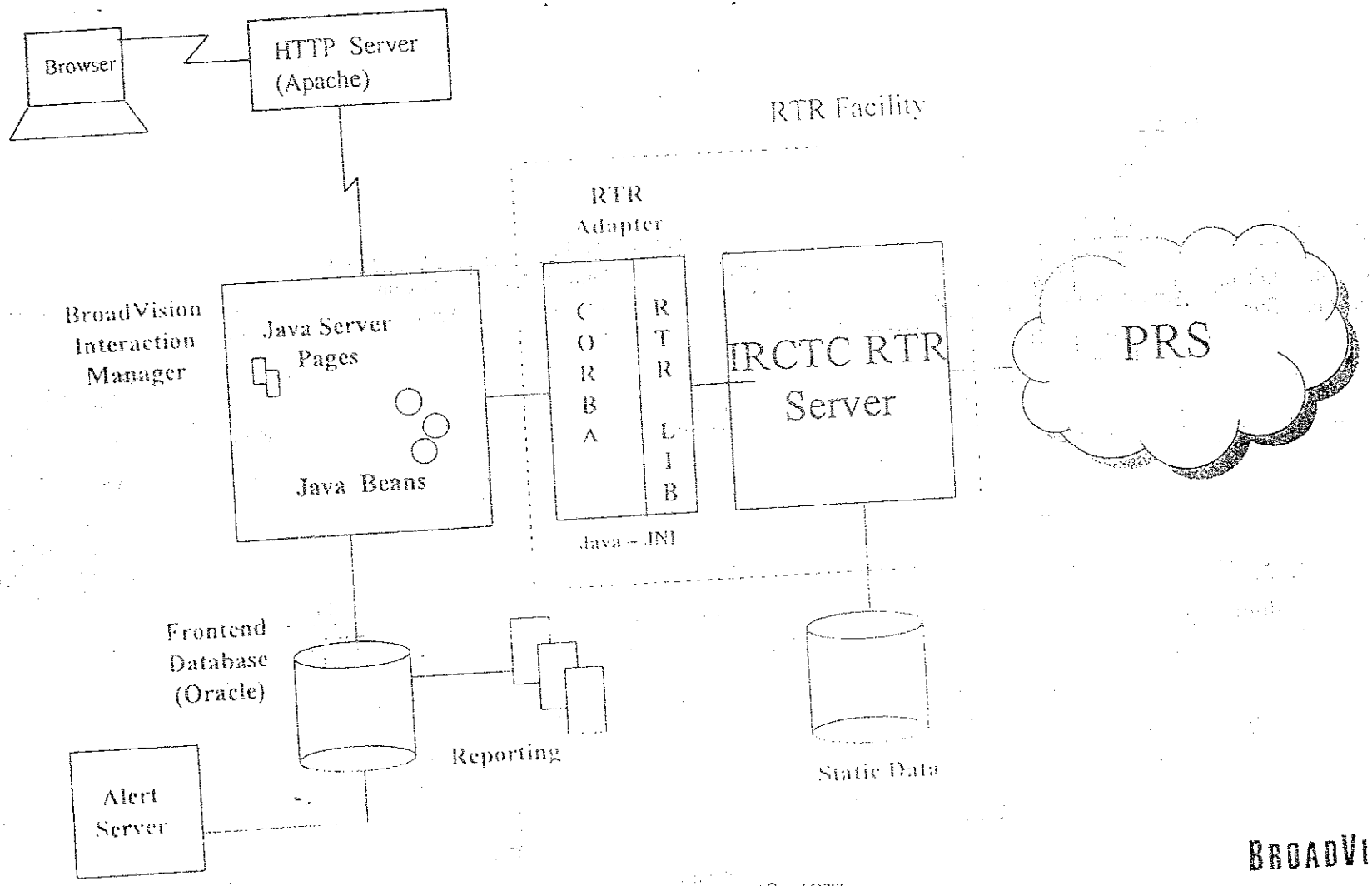


Reservation Screen II




Browser
HTTP Server
(IIS/Apache)
Java Server Pages Engine
High-Speed Caching
Application Dictionary
Session Manager
Observ. System
Component Object Library
Session Client API
CORBA/J2EE
BroadVision Interaction Manager
Fully-Exposed APIs
Session Client API
BroadVision One-to-One Services
Profile Mgmt
Persistent Profiles
Session Profiles
Communities
Households
Content Mgmt
Products
Editorials
Advertise
Discussion
Templates
Incentives
User-Defined
Matching
Direct
User-Defined
Collaborative
Rules
Matching Agents
Entitlements
E-Mail Targeting
Alerts
Text Search
Parametric Search
Voting
JAVA CORBA Adapter to RTR
RTR Server
CORBA
DBACCESSOR
J2EE
BV Database
Oracle RDBMS Server
Scripts
Windows Client
Any Editor
BroadVision Design Center OR Any IDE
Rules, Content
BroadVision Command Center
Windows Client
CORBA
Company Confidential and Proprietary
BROADVISION

ANNEX II



BROADVISION

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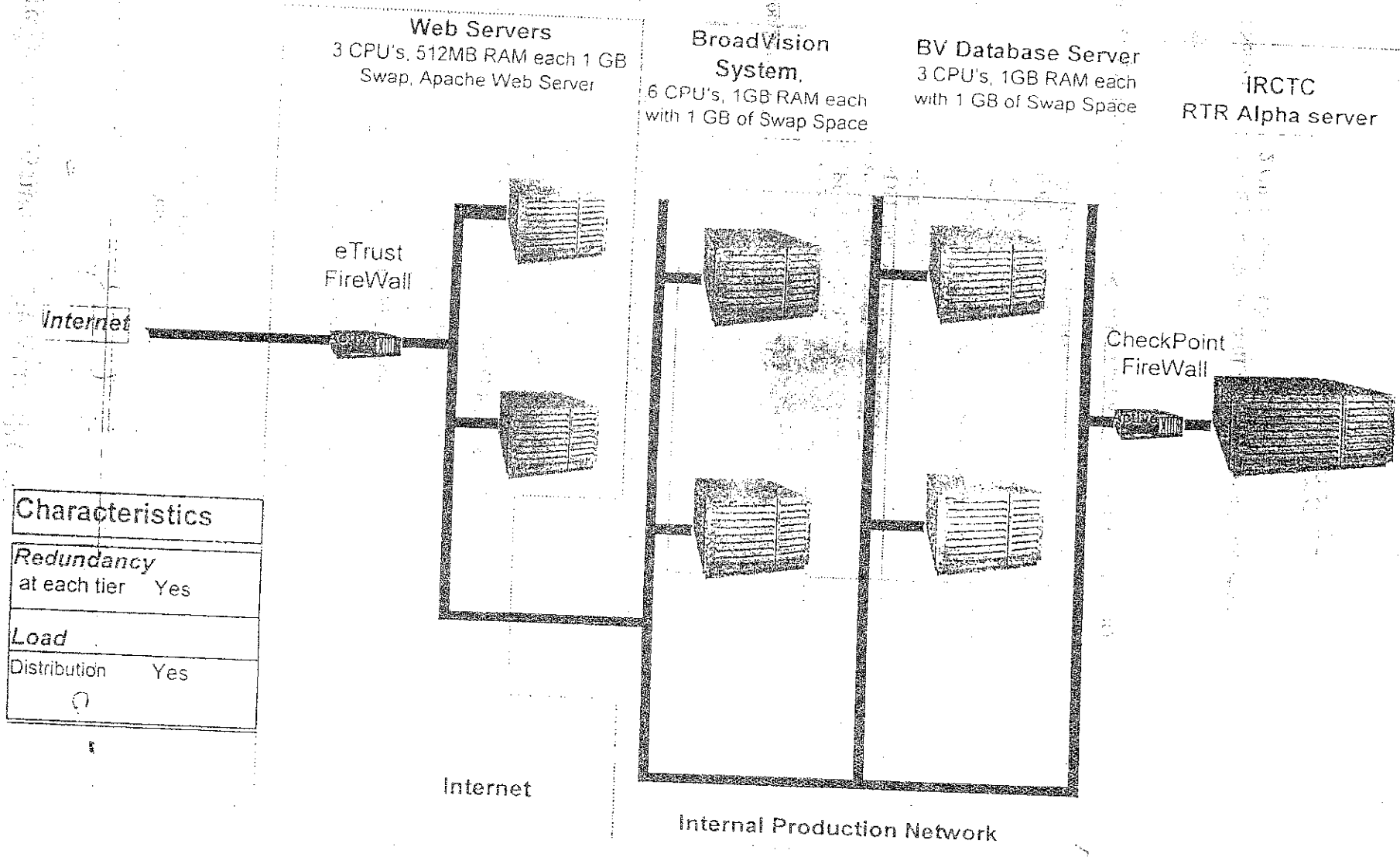
BroadVision Deployment Architecture for IRCTC



Characteristics	
Redundancy at each tier	Yes
Load Distribution	Yes

Hardware for Deployment Architecture IRCTC

Firewall

Server: 2-Way Pentium III Server
2 HDD Ultra 3 SCSI
512 MB RAM

Web Server

Server 1: 2-Way Pentium III processor based Server
2 CPU's populated
512KB L2 cache or Higher
1 HDD Ultra 3 SCSI
1 GB RAM (512MB per CPU)

Server 2: 2-Way Pentium III Processor based Server
1 CPU populated
512KB L2 cache or Higher
1 HDD Ultra 3 SCSI
1GB RAM (512MB per CPU)

Load balancing Solution: WLBS (comes with Windows 2000 Advanced Server)

Application Server (IM + 1:1)

Server 1: 4-Way Intel Pentium III Xeon processor based server
4 CPU's populated
2MB L2 cache,
2 HDD Ultra 3 SCSI
4 GB RAM (1 GB per CPU)

Server 2: 4-Way Intel Pentium III Xeon processor based server
2 CPU's populated
2MB L2 cache
2 HDD Ultra 3 SCSI
2 GB RAM (1 GB per CPU)

Load balancing Solution: comes with BroadVision (in plugin for the webserver)

Database Tier

(Primary) Server: 4-Way Intel Pentium III Xeon processor based server
2 CPU's populated

2MB L2 cache
2 HDD Ultra 3 SCSI
Additional Storage Disk for Database, 100 GB
2 GB RAM (1 GB per CPU)

(Secondary) Server: 2-Way Intel Pentium III Processor Based server
1 CPU populated
512KB L2 cache or Higher
2 HDD Ultra 3 SCSI
Additional Storage Disk for Database, 100 GB
1 GB RAM

Network Interface Cards (NIC's)

Bandwidth: 100 Mbps
Number: 10
(2 for the firewall host, 2 per web server host,
1 per Application Server host, 1 per DBMS host)

Note :
All Servers should be rackmountable.
Vendors should quote the best possible CPU Speed for the CPU's mentioned above

Rack Bill of Material

24 Port 510T Switch
Suitable rack mount for housing all the above machines along with provision for a Monitor, keyboard and mouse.

CONNECTIVITY :PRS–IRCTC(IRCA)-IRCTC(OFFICE)

The diagram shows the three blocks segregating the following components -

1. IRCTC-IRCA: IRCTC's computer systems and related infrastructure which will be located in IRCA Building on ground floor

2. PRS: Computer system & related infrastructure located in First Floor, IRCA building in Delhi . The VMS server and firewall [Provided by IRCTC] is also hosted on first floor.

3. IRCTC-OFFICE Printing terminals & other infrastructure located in Bank of Baroda Building, New Delhi.

Thus, 1,2,3 will be referred as IRCTC-IRCA, PRS and IRCTC-OFFICE.

IRCTC-IRCA and PRS will be connected on LAN network through VMS server hosted for this purpose and transaction will be routed through a firewall.

Ticket printing will be done in IRCTC-OFFICE and serial ports will be extended through modem and muxes from PRS, Delhi . Railways to allocate 16 ports for this purpose to IRCTC

Out of these 16 ports, 8 ports will be extended from PRS to IRCTC-OFFICE directly as terminals extended to various PRS booking locations, through a dedicated 64 K leased line for ticket printing. The communication channel cost, modem and muxes cost will be born by IRCTC. Balance 8 ports will be extended to IRCTC-IRCA.

IRCTC-OFFICE will have one more 64 K dedicated channel connected directly to IRCTC IRCA for system monitoring & administration.

IRCTC-IRCA will connect to outside world through an ISP.

CONNECTIVITY:PRS--IRCTC(IRCA)--IRCTC(OFFICE)