

Proposal for Project Raksha Sutra

Mission – M.A.Y.A.

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Objective :-

Building theIndian Artificially intelligent Operating system with Indian Computer and Indian bunkers . For safety, Communication and computation.



1. Outer SHELL / INFRASTRUCTURE

2 D Design and Model of shell /bunker block with hollow channels for flow of water air data and electricity.

Shell or infrastructure is defined as the constructed premises required for the technology accommodation.

For example there are foreign agencies with army AI server build inside dams of water reservoirs for cooling capability.

As the technology is designed for Army the shell or infrastructure must be that of a bunker , the



technology we are using is well explained by a video posted by IDEX DIO<u>https://youtu.be/IgKKTKNHRNQ</u> Challenge 22 by TCL

2. Hardware .

Now as the shell is capable of providing necessary physical conditions like safety cooling and other important parameters required to safegaurd the server or the people inside , we will move ahead with hardware.

By hardware we refer to he combination of electronics required to facilitate computation.



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Photo 1 – assembly of Vikrant / Server block



3. Code



Photo2:- Code which explains on/off code for system written in c++.

The code or the program refers to the software which will be developed for building an AI/OS/BIOS/KERNEL/SOURCE CODE.

These set of code when computed will provided all necessary functions and features required by Armed forces



4. Network

Network is the sub system consisting of h specific hardware government by specific code in the system used for connection of two different components placed on different locations.

The network is the connecting thread or the line of communication between two syste.s.

Concept :-

Conventional system :-

Conventional system used across the globe for shell, hardware, code or network consist of air-conditioned rooms, supercomputers, servers, processors like Intel and kernel like Linux and os like windows and AI like siri,Cortina,Google assistant.

Our concept :-



For the shell we are using a DC powered Uniquely designed metal room made using hollow blocks and water pumps / air supply system etc which doesn't need large water reservoirs or air-conditioning system. The shell is made up of universal bunker block of size 3x8 inch with four channels.

For the hardware we are using a universal server block attached to the shell blocks. So for every single shell block we will place a server block.



So where B1 stands for shell block/bunker block and V1 stands for Vikrant block/ server block. A small system made for four blocks assembled together can represented as

BbVb =

= 0; sc) == 0; cerelse SCO==1 when/if sco==1 Kin24A; if A = = 1BI = = 1 10ly RIZZO " if A==2 ; B2==1 else B2==0; llsame fo B2==1, E1==1; uf B1==21, E1==1; 52==1 Clk 82== 0 $if B_1 = = 1$ $0_1 = = 1$;

B1b1V1b2 + B2 b1V2b2 + B3b3V3b3 + B4b4 V4b4



As MAYA is term we are using to represent all the programming/code in order to assemble the system which will working as a distributed operating system.

So every block will have specific line of code which will be used for computation.

As every server block/ Vikrant block will be capable for let's say 2mb ram and 8mb memory similar to a calculator or a small electronic device.

The Code inside the small component assembled and represented as VbBbcan be represented by M1b1

So now a system of Code of 64kb, one bunker block of half kg and hardware block of 2mb ram and 8mb memory.

VBM = V1B1M1 + V2B2M2 = VbBbMb = V1b1 M1b1 B1b1 It is even easier to represent same as Vb1 = server block 1 Mb1 = Maya block 1 Bb1 = Bunker block 1

So now representation will be VbMbBb = Vb1 Mb1 Bb1 + Vb2 Mb2 Bb3 + Vb3 Mb2 Bb3

So now this system termed as VbMbBb can be called as small computation system capable of strong physical shell, one hardware set capable of computation and one Code capable of specific computation.

Now if we are to assemble a system which required 64mb ram then

Mblock required = 64/2 = 32 blocks

M block can also be termed as virtual blocks for easier understanding.

Vikrant block as also be termed as Server block for easier understanding

Bunker block can also be termed as building block for easier understanding.

As every Mblock has 2mb of ram hence 32 blocks will be required.

To assembled 32 blocks we need 32 bunker blocks as well server blocks.

So in another words for easier understanding.

For a system with 64 mb ram we need. 32virtual blocks 32 server blocks nd 32 building blocks.

Moving ahead.

The concept has a provision of network . The network Can denoted by capital "N". So the network required specific hardware set and code for forming a Node So every block must have a node so it can connected with another block. It could be an port such as USB ,ip,orethernet. The node or network will be denoted by N

Now.

Our system can be denotation's BVMN Where B stands for bunker V stands for Server block M Stands for Maya N stands for Network. BVMN System of 64mb RAM will have subcomponents terms as B1V1M1N1 and B1V1M1N1. So ,

BVMN = B1V1M1N1 + B2V2M2N2 +B3V3M3N3 +B4V4M4N4 +.....B32V32M32N32.

This system will have 32 nodes, 32 set of code, 32 shell blocks and 32 server blocks.

The nodes will allow connection.



Photograph 3 :- Explain assembly of server blocks in parallel way.



The code will be responsible for processing The hardware assembly will help in computation The bunker block will provide necessary physical conditions.

So using the system explained above we will be able to assemble a computer for as much required ram memory or network. In conventional system A processor has a bios upon which the OS installed in the Harddisk performed computation upon the RAM.

Here the system doesn't have a centralized way of assemble hence C.P.U won't be needed rather a parallel processing unit is being formed.

Hence to operate such system every bit of data have to written in certain way that it can computed over a distributed OS with parallel programing.



For example if I am to store information such as a number "51" so it will be first converted into binary ie 11011.

Now in six different blocks each memory will be stored hence number 51 will be first converted to binary as 11011 and then

B1V1M1N1 = 1 B2V2M2N2 = 1 B3V3M3N3 = 0 B4V4M4N4 = 0 B5V5M5N5 = 1B6V6M6N6 = 0

Now, bits used for storing the above information = 3bits = 3bytes.

Which means out of 12000 kb (approx) memory of 6block system 3bits are occupied by "110011" or "51".

To access this information one needs to access the blocks using the nodes. So every block contain the unique address will be accessed and memory will be loaded into ram units and accessed as allocated.

Photograph 4 :- Memory allocation and access diagram.



Hence even if I lose access to one of the block I won't be able to fetch the stored information which clearly state how it his adds into security. Once the shell is formed and hardware is assembled in the manner as explained in the photo and connected via nodes as explained in the diagram.

We will have to write the code foe MAYA. The code consist of following components

- 1. BIOS
- 2. KERNEL
- 3. OS
- 4. AI

SO, BIOS INCLUDES

1. Power management

2. System Archetecture manager such as capacitors, connections between subcompoents

3. Driver for sub components such as ram, rom, node, input output devices etc

4. Access and process of data.

Kenerlincludes :-

1. Database

2. Important software programs like firewall, anti virus, drivers, and network Etc

3. Management softwares compilers and storage grid

4. User management.

OS includes :-

1 Software for communication

2.software for office use.

3. Software for communication and file transfer

4. Security threat management software etc

AI includes:-

1. Self acting system for system stability.

2. Self acting system for security

3. Self acting system for human interface

4. Machine learning and cloud management System.

The resources required to build will be :-

1. Construction material hybrid composite made out of combination of fly ash, marble ash, zirconia dust, wood dust, boron carbide powder and steel plate.

2. Cooling equipment such as DC motors, DC fans, couplers and metal channels.



3. Hardware components such as ram unit, memory unit, jumper wires , capacitors, relaw module , ESP module , wifi module, etc.

4. Code will written using binary and cpp from the scratch without utilizing outside patch but for learning purpose the open source code will be utilised.

Fundingfor :-

Lab Manpower Raw material Miscellaneous

Funding sources:-

Bank via PMEGP SCHEME IDEX DIO GRANT FOR DESIGNING OF PORTAE BUNKER DISC 6 CHALLENGE 22 MAKE 1 FOR SECURE COMMUNICATION SYSTEM EQPT MAKE 2 FOR MAYA Prayas Grant by NITI AYOG GRANT FROM NRI GROUP OF INSTITUTIONS START UP INDIA SEED FUND SCHEME Investment from Paras Aerospace and Defence limited

Total Investment :- 100cr Total Profit after selling to armed forces with patent rights :- 800Cr (Unicorn)

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